

# **Attachment 4**

## **Budget**

**Integrated Regional Water Management Implementation  
Prop 84, Round 1**

**Santa Ana Watershed Project Authority**

**Santa Ana One Water One Watershed IRWM  
Prop 84, Round 1 Implementation Proposal**

\*List sources of funding: The Groundwater Replenishment System Flow Equalization project is a debt-funded capital improvement project and will be funded by OCWD capital improvement project budget. OCWD is also exploring the option of a Clean Water State Revolving Fund (CWSRF) loan with the Division of Financial Assistance at the State Water Resources Control Board. OCWD shall inform SAWPA and DWR on the status of its CWSRF loan application.

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

OCWD has extensive experience with administering various types of construction projects ranging from treatment plants to pipelines to recharge basins. OCWD has recently completed 6 construction projects associated with the GWRs. The budget of direct administration cost of \$150,000 is based on OCWD prior experience with similar projects. OCWD will pay for this cost with its own funds and will not seek reimbursement from IRWM Implementation Grant.

**B. Row (b) Land Purchase/Easement**

Not applicable.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

The design is 90% complete and the design cost for this project is \$557,000. A budget of \$20,000 is included for air quality study as part of CEQA compliance documentation. The cost of designer services during the construction is \$500,000. OCWD will fund 100% of these costs.

**D. Row (d) Construction/Implementation**

The design is 90% complete and the opinion of probable construction cost is \$24,515,204 as of October 1, 2010. The breakdown of construction/implementation cost of \$24,515,204 includes: site work

(\$2,330,846); two equalization tanks (\$13,998,029); pump station (\$2,596,638); general requirements (\$3,720,315); metering vault (\$565,787); electrical building (\$426,033); microfiltration backwash waste return pipeline extension (\$338,104); and mid-point of construction (\$539,454).

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

OCWD has budgeted \$10,000 for any environmental mitigation measures of air quality monitoring, noise and, if needed, traffic plan.

**F. Row (f) Construction Administration**

The construction administration cost of \$1,500,000 is a conservative estimate and based solely on OCWD's prior experiences with six construction projects of GWRS. OCWD will fund 100% of this cost and will not seek reimbursement from IRWM Implementation Grant.

**G. Row (g) Other Costs**

Other costs to support this project include legal services (\$75,000), materials testing (\$300,000), survey (\$20,000), and public outreach (\$75,000). OCWD will fund 100% of these costs.

**H. Row (h) Construction/Implementation Contingency**

A five percent of construction/implementation cost is included herein as contingencies to handle unknown conditions encountered during construction. This percentage is based on OCWD's extensive construction experiences with prior projects. It is also a standard practice for OCWD to assign this percentage for any construction project. OCWD will fund 100% of this contingency cost.

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

## Project (b) Sludge Dewatering, Odor Control, and Primary Sludge Thickening

<b>Table 7(b) - Project Budget</b> <b>Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b> <b>Project Title: Sludge Dewatering, Odor Control, and Primary Sludge Thickening</b>						
Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$4,000,000	\$55,556	\$0	\$4,055,556	<b>99%</b>
<b>(b)</b>	Land Purchase/Easement	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$7,565,600	\$0	\$0	\$7,565,600	<b>100%</b>
<b>(d)</b>	Construction/Implementation	\$103,000,000	\$1,000,000	\$0	\$104,000,000	<b>99%</b>
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$200,000	\$0	\$0	\$200,000	<b>100%</b>
<b>(f)</b>	Construction Administration	\$13,000,000	\$0	\$0	\$13,000,000	<b>100%</b>
<b>(g)</b>	Legal Costs	\$250,000	\$0	\$0	\$250,000	<b>100%</b>
<b>(h)</b>	Construction/Implementation Contingency	\$10,100,000	\$0	\$0	\$10,100,000	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$138,115,600</b>	<b>\$1,055,556</b>	<b>\$0</b>	<b>\$139,171,156</b>	<b>99%</b>
*List sources of funding: Orange County Sanitation District Bonds and \$2,025,000 from USEPA for design only.						

The Project is required to handle increased solids generation resulting from the Orange County Sanitation District's (OCSD) secondary treatment facility upgrades and provide additional source water to the Groundwater Replenishment System (GWRS) to produce 31,000 AFY of additional recycled water. The additional water will be used by the Orange County Water District to replenish the Orange County groundwater basin within the Santa Ana River Watershed.

Without this Project, OCSD would be unable to treat the additional solids at their Plant No. 1 facilities. Flows would be diverted to OCSD Plant No. 2 for solids treatment, where the source water or secondary effluent is non-reclaimable and discharged to the Pacific Ocean. The secondary effluent/feed-water can only be reclaimed through OCSD Plant No. 1 facilities, since it has the existing physical facilities to convey the source water by

gravity flow next door to the OCWD facilities, unlike, Plant No. 2. Plant No. 2 is not equipped with the physical structures to pump flow from Plant 2 to Plant No. 1.

Table 7(b) presents the estimated cost of the P1-101 Project. The costs are based on detailed cost estimates managed by OCSD and developed as work breakdown packages during the planning and preliminary design work that form the basis of the Project. The cost breakdown structure associated with Table 7(b) differs from the OCSD Work Breakdown Structure (WBS). The OCSD WBS is divided into phases<sup>1</sup>, work packages and cost codes. The OCSD has tailored its Resource Load Report, schedule and existing WBS to match Table 7(b).

Note: "Phases" strictly refers to data management and tracking of work performed on the P1-101 Project.

The OCSD is requesting \$1,000,000 in grant funding for construction implementation, Row (d). Grant funds are not being requested for any other item identified in Table 7(b) however, all P1-101 Project costs are presented.

The total amount for the P1-101 Project costs is estimated at \$143,550,000. A portion of the total amount was incurred prior to September 30, 2008. Therefore, the amount shown in Table 7(b) has been adjusted to omit unrecoverable costs incurred prior to September 30, 2008. After adjustments, the total estimated cost for the P1-101 Project is \$139,115, 600, which is the estimated cost of the project after September 30, 2008. In accordance with the grant application requirements, this amount is converted to 2009 dollars for a total Project cost of \$108,427,274.

#### A. Row (a) Direct project Administration Costs

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997

**SAWPA Project Administration:** **655** **\$53,806**

<b>Other SAWPA Project Administration Costs</b>	Supplies	\$500
	Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>		<b>\$55,556</b>

Administration costs for OCSD staff labor hours such as time spent by engineers, project managers, project administration staff, and project controls staff to review and monitor progress of work. The unit cost per hour ranges from \$110/hour to \$250/hour. The costs are based on actual resource hours budgeted and expended to date. The current average billable rates for the OCSD are identified in Table 4A below:

<b>Table 4A</b>					
DEPARTMENT/DIVISION		DIV#	Avg. Hourly Rate	Burdened Overhead	Total
<b>GEN MGRS OFFICE</b>					
Administration		110	\$125	\$125	\$250
Board Services		120	\$55	\$55	\$110
Public Affairs (includes Communications)		140	\$55	\$55	\$110
Human Resources		160	\$55	\$55	\$110
<b>ADMINISTRATIVE SERVICES</b>					
Administrative Services		210	\$100	\$100	\$200
Financial Management		220	\$55	\$55	\$110
Contract/Purchasing/MM		230	\$55	\$55	\$110
Information Technology (IT and Facility Records Data)		250	\$125	\$55	\$180
Risk Management (includes Safety)		260	\$55	\$55	\$110
<b>FACILITIES SUPPORT SERVICES DEPARTMENT</b>					
Administration		310	\$100	\$100	\$200
Equipment – Rebuild		320	\$55	\$85	\$140
Facilities Engineering		330	\$60	\$105	\$165
Collections		340	\$55	\$80	\$135
<b>ENGINEERING</b>					
Administration		710	\$100	\$100	\$200
Planning		740	\$60	\$130	\$190
PMO (includes Project Management Consultants (PMO), Estimator PCI, PC, Project Partners)		750	\$60	\$120	\$180
Inspection		760	\$55	\$105	\$160
Profession Engineer (PE / Resident Engineer (RE) (includes construction support)		760	\$60	\$115	\$175
Asset Management		780	\$60	\$130	\$190
ERCA		790	\$55	\$60	\$115
<b>OPS &amp; MAINT</b>					
Administration		810	\$100	\$100	\$200
Plant 1 Operations & Maintenance (includes O&M Process Engineering)		830	\$55	\$55	\$110
Plant 2 Operations		840	\$55	\$55	\$110
Mechanical and Reliability Maintenance		850	\$55	\$60	\$115
Instrumentation and Electrical Maintenance ( includes I&C, electrical)		860	\$55	\$55	\$110
Environmental Lab and Ocean Monitoring		890	\$55	\$65	\$120

Actual average costs per hour vary based on the resource utilization of the project as the project progresses. The resource hours and costs are estimated at the beginning of the project and updated annually with actual costs and revised projections.

The P1-101 Resource Load Report in this section provides applicable cost codes for this item (3110, 3120, 3170, 3180, 3210, 3220, 3259, 3270, 3273, 3310, 3410, and 3510), roles, and expended hours. The total non-State Direct Project Administration Costs for Row (a) is \$4,000,000; however, no grant funds are being requested for this Item.

**B. Row (b) Land Purchase/Easement**

The land on which the P1-101 Project will reside is owned and maintained by the OCSD. There are no required land purchases or easements needed for this Project. The OCSD purchased the 108-acre, Plant No. 1 site in 1954. There are no costs associated with future land purchases or easements. Therefore, the value assigned to Row (b) is zero.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

This is the cost spent by the design consultant (and sub-consultants) along with necessary engineering field investigations in preparing the design documents for the Project. The OCSD professional services agreement commits the Consultant(s) to prepare construction bid documents including engineering plans and specifications.

The original contract authorization amount of \$14,086,492 was divided among one (1) professional services agreement (PSA) and two (2) contract amendments and are as follows:

- Original Contract – Consist of the prime Design Consultant - HDR, three (3) sub-consultants (Black & Veatch, Earth Tech, and Westin), and eleven minor sub-consultants, for an initial cost of \$10,668,995.72.
- Amendment No. 1 to the original contract consists of changes to task hours/fees for an amount of \$562,917.
- Amendment No. 2 to the original contract consists of changes to accommodate increased drawing count and reviews, project escalation delays for labor, and increase direct costs for \$2,394,000. The OCSD requires the Consultant(s) to track and bill their projects based on consultant's WBS as proposed by the Consultant.

Planning and Design Consultants	Fee
Original Contract	\$11,129,575
Amendment No. 1	\$562,917
Amendment No. 2	\$2,394,000
Total Amount	\$14,086,492



There is no project contingency in the Consultants budgets.

The WBS by cost codes 3031(shared by staff and contract staff), 3141, 3143, 3146, 3200, 3250, 3251, 3252, 3253, 3254, and 3258) are shown in the attached table titled “P1-101 Resource Load Report” reorganized to match the Table 7 WBS, however, no grant funds are being requested for this item.

#### *Environmental Documentation*

The OCSD has completed the environmental documentation for the P1-101 Project, in compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). The “Secondary Treatment Plant Improvement Project Subsequent Environmental Impact Report (EIR)”, Schedule No. 2004031076, was completed in April 2005, adopted by OCSD’s Board of Directors on May 25, 2005, and a Notice of Determination was filed on May 26, 2005 with the County of Orange and State Clearinghouse.

A Categorical Exclusion for the P1-101 Project was filed on June 2, 2006 in compliance with NEPA. The OCSD appropriated a grant for \$2,025,000 for design of the P1-101 Project, through EPA’s State and Tribal Assistance Grant (STAG) Program. The EPA grant fund has been reflected under Cost Code 3299. Upon completion of final design in August 2011, OCSD is to receive payment from EPA.

The environmental documentation under CEQA and NEPA was prepared and completed by separate OCSD projects in 2005 and 2006 respectively, prior to the September 30, 2008 unrecoverable costs. However, OCSD has included \$200,000 under cost code 3258 for staff time to coordinate and incorporate the requirements specified in the environmental documents into the Project design specifications prior to bid.

The total cost incurred under Planning/Design Engineering/Environmental Documentation is \$14,000,000. After adjustment for unrecoverable costs (costs incurred prior to September 30, 2008), a remaining balance of \$7,565,600 has been brought forward. OCSD is not requesting grant funds for this Item.

#### **D. Row (d) Construction/Implementation**

This provides the construction cost estimate of the project. The cost estimate is broken down by Construction Specifications Institute (CSI) format. The design submittal will include more details for each design discipline. The consultant, HDR, prepared the cost estimate. The total Project is estimated at \$104,000,000. OCSD has budgeted for the full amount of the P1-101 Project and funds have been secured for Project completion. The funding has been collected from OCSD ratepayer fees, issuance of Certificate of Participation (COPs), and federal EPA grant funding. **OCSD is requesting \$1,000,000 in grant funding from the Department of Water Resources for the construction implementation** but is committed to providing defined local match regardless.

This cost does not include any construction management or construction administration costs that will be expended by OCSD.

The WBS by individual tasks (cost codes 3360, 3460, and 3560) are shown in attached table titled “P1-101 Resource Load Report” reorganized to match Table 7(b) WBS. An additional cost code 3480 was added to the Report to reflect Proposition 84 grant funding as a place holder in.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

This is OCSD staff costs spent to comply with the approved environmental documents and mitigation, monitoring, and reporting program (MMRP). The OCSD resident engineer will be responsible for overseeing compliance with the MMRP. OCSD's MMRP can be found in the "Secondary Treatment Plant Improvement Project Subsequent Draft Environmental Impact Report, SCH 2004031076".

The WBS for individual task (cost code 3358) is shown in attached table titled "P1-101 Resource Load Report. Approximately \$200,000 has been allocated to environmental compliance/mitigation enhancement, however, there are no grant funds being requested for this item.

**F. Row (f) Construction Administration**

Construction management at OCSD is performed in-house by staff, contract consultants functioning as in-house staff, and supported by the design consultant. Construction management costs are based on the bench mark set by the OCSD. The OCSD uses a bench mark for in-house staff costs that varies from 8-10% and consultant costs ranging from 5-8% of the construction cost estimate. The methodology was described in further detail and included in the OCSD "Cost, Schedule, and Prioritization Methodology Summary Report. For this project we have assumed a total of 13% (approximately 8% for in-house staff labor and 5% for consultant) as construction administration costs.

The resulting costs are distributed using the hourly rates of staff that ranges from \$110/hour to \$250/hour based on the current average billable rates as identified in Table 4A.

Actual average costs per hour vary based on the resource utilization of the project as the project progresses.

The individual construction administration cost codes (3320, 3321, 3350, 3362, 3363, 3370, 3420, 3421, 3422, 3450, 3462, 3520, and 3570) are included in the "P1-101 Resource Load Report" contained in this section. The costs are inclusive of construction testing, inspection, commissioning, and construction services. The total costs for construction administration is \$13,000,000. There are no grant funds being requested by OCSD for this item.

**G. Row (g) Other Costs**

The costs are for obtaining permits, Staff costs for monitoring permit compliance, and legal counsel to review sensitive and controversial issues on the P1-101 Project.

The P1-101 Project will require the following permits with estimated permit fees:

1) Cal/OSHA Permits	\$500
2) City of Fountain Valley	\$2,000
3) SCAQMD Equipment Permits	\$8,000
4) RWQCB Stormwater	\$100

A detailed description of permits is included in the body of the P1-101 Project Work Plan. The cost associated with the permits includes a combination of fees ranging from \$100-\$8,000 paid directly to the permitting agency, based on previous experience and past projects of this size.

Legal Counsel Fees range from \$203 to \$259 per hour. For OCSD staff, the resulting costs are distributed using the hourly rates of staff that ranges from \$110/hour to \$250/hour and the current

average billable rates as identified in Table 4A. Actual average costs per hour vary based on the resource utilization of the project as the project progresses.

The other costs are shown on the attached P1-101 Project Resource Load Report under cost codes 3290, and 3390.

**H. Row (h) Construction/Implementation Contingency**

Based on the best practices set by OCSD's Project Management Office, we applied 10% of the construction cost estimate as contingency for all phases<sup>1</sup> of the Project. The 10% contingency is based on changes forecast on design contracts and construction contracts for the remainder of the project. The contingency amount may be modified as the project progresses depending on the risks foreseen on the P1-101 Project.

Construction/Implementation Contingency funds are included in the "P1-101 Resource Load Report", under Cost Code 3600.

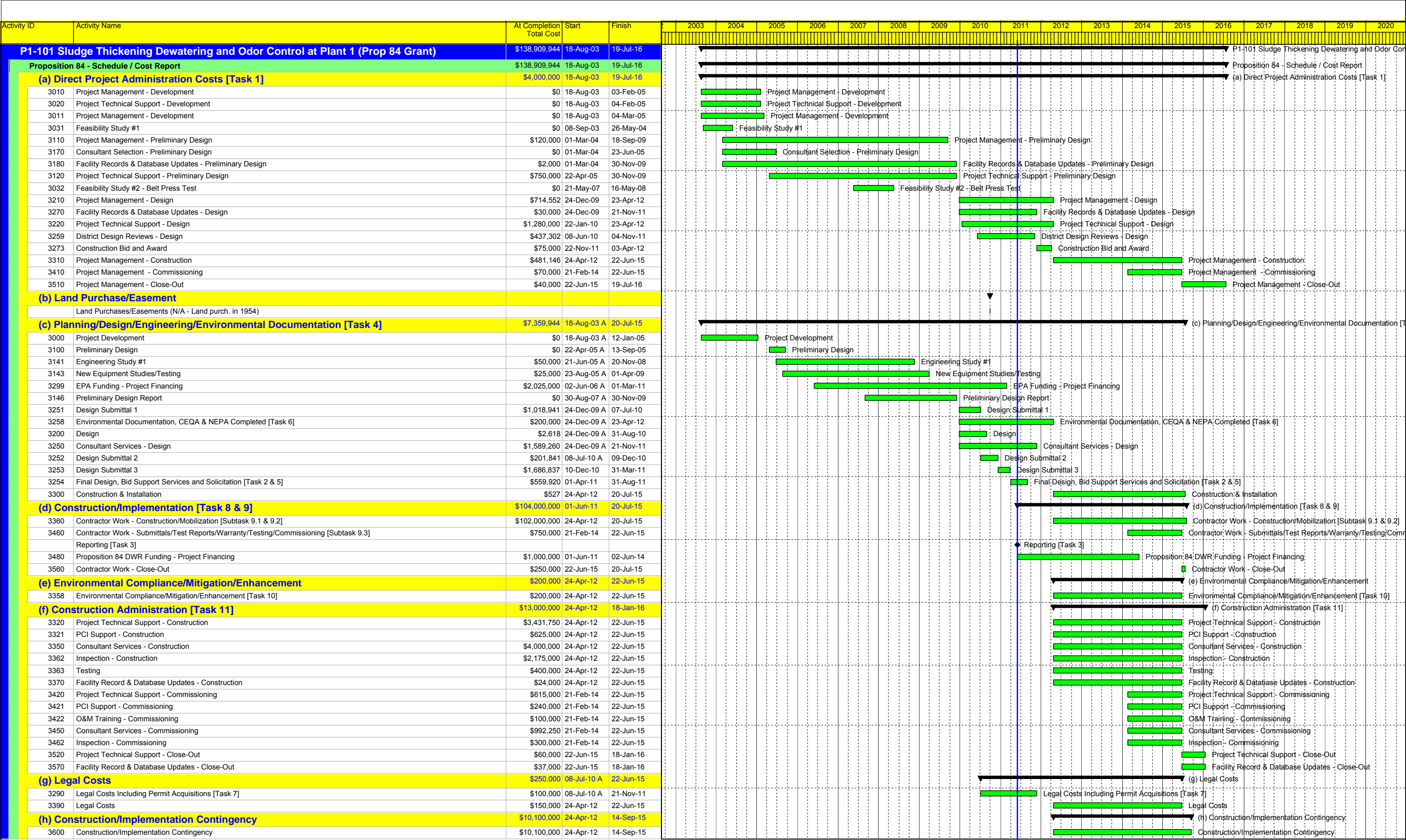
**Attachments**

- 1) P1-101 Resource Load Report
- 2) Proposition 84 Schedule/ Cost Report

**Appendices**

Appendix 4-E - OCSD Cost, Schedule, and Prioritization Methodology Summary Report, without referenced appendices

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**



Current Schedule

Milestone

Summary

Data as of 07-Jan-11

P1-101 Sludge Thickening  
Dewatering and Odor Control at  
Plant 1 (Prop 84 Grant)

Schedule / Cost Report



# Project (b) Sludge Dewatering, Odor Control, and Primary Sludge Thickening (OCSD)

P1-101

## Sludge Thickening Dewatering and Odor Control at Plant 1

### OCSD's Resource Load Report

Proj No	Cost Codes	Work Package Name	Role	Start Date	Finish Date	Hours Budget	ETC Avg \$/Hr	Project Budget
<b>P1-101</b>	<b>(a)</b>	<b>Direct Project Administration Costs</b>						
P1-101	3010	Project Management - Development		18-Aug-03 A	03-Feb-05 A			\$ -
P1-101	3010	Project Management - Development	Other-Misc.	18-Aug-03 A	03-Feb-05 A	0.00		
P1-101	3010	Project Management - Development	PMO/PC	18-Aug-03 A	03-Feb-05 A	0.00		
P1-101	3010	Project Management - Development	Project Managers	18-Aug-03 A	03-Feb-05 A	0.00		
<b>P1-101</b>	<b>3010</b>	<b>- Project Management - Development</b>				<b>0.00</b>		<b>\$ -</b>
P1-101	3011	Project Management - Development		18-Aug-03 A	03-Mar-05			\$ -
P1-101	3011	Project Management - Development	Other-Misc.	18-Aug-03 A	03-Mar-05	0.00		
P1-101	3011	Project Management - Development	PMO/PC	18-Aug-03 A	03-Mar-05	0.00		
P1-101	3011	Project Management - Development	Project Managers	18-Aug-03 A	03-Mar-05	0.00		
<b>P1-101</b>	<b>3011</b>	<b>- Project Management - Development</b>				<b>0.00</b>		<b>\$ -</b>
P1-101	3020	Project Technical Support - Development		18-Aug-03 A	04-Feb-05 A			\$ -
P1-101	3020	Project Technical Support - Development	Admin Support	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Construction Support	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Contracts	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Electrical	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	I&C	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Inspection	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	O&M Other	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	O&M Process Engineering	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Other-Misc.	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	PCI Group	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	PCI-Engineering Support	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Planning	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	PMO/PC	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Project Engineers	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Project Support	18-Aug-03 A	04-Feb-05 A	0.00		
P1-101	3020	Project Technical Support - Development	Resident Engineers	18-Aug-03 A	04-Feb-05 A	0.00		
<b>P1-101</b>	<b>3020</b>	<b>- Project Technical Support - Development</b>				<b>0.00</b>		<b>\$ -</b>
P1-101	3031	Feasibility Study #1		08-Sep-03 A	26-May-04 A			\$ -
P1-101	3031	Feasibility Study #1	O&M Other	08-Sep-03 A	26-May-04 A	0.00		
P1-101	3031	Feasibility Study #1	O&M Process Engineering	08-Sep-03 A	26-May-04 A	0.00		
P1-101	3031	Feasibility Study #1	Planning	08-Sep-03 A	26-May-04 A	0.00		
P1-101	3031	Feasibility Study #1	Project Engineers	08-Sep-03 A	26-May-04 A	0.00		
<b>P1-101</b>	<b>3031</b>	<b>- Feasibility Study #1</b>				<b>0.00</b>		<b>\$ -</b>
P1-101	3032	Feasibility Study #2 - Belt Press Test		21-May-07 A	16-May-08 A			\$ -
P1-101	3032	Feasibility Study #2 - Belt Press Test	Admin Support	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	Electrical	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	I&C	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	O&M Other	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	O&M Process Engineering	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	Other-Misc.	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	PCI Group	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	PCI-Engineering Support	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	PCI-Programmer	21-May-07 A	16-May-08 A	0.00		
P1-101	3032	Feasibility Study #2 - Belt Press Test	Project Engineers	21-May-07 A	16-May-08 A	0.00		
<b>P1-101</b>	<b>3032</b>	<b>- Feasibility Study #2 - Belt Press Test</b>				<b>0.00</b>		<b>\$ -</b>

**P1-101**  
**Sludge Thickening Dewatering and Odor Control at Plant 1**  
**OCSD's Resource Load Report**

Proj No	Cost Codes	Work Package Name	Role	Start Date	Finish Date	Hours Budget	ETC Avg \$/Hr	Project Budget
P1-101	3110	Project Management - Preliminary Design		01-Mar-04 A	17-Sep-09			\$ 120,000
P1-101	3110	Project Management - Preliminary Design	O&M Other	01-Mar-04 A	17-Sep-09	10.00		
P1-101	3110	Project Management - Preliminary Design	O&M Process Engineering	01-Mar-04 A	17-Sep-09	0.00		
P1-101	3110	Project Management - Preliminary Design	PMO/PC	01-Mar-04 A	17-Sep-09	17.00		
P1-101	3110	Project Management - Preliminary Design	Project Managers	01-Mar-04 A	17-Sep-09	660.00		
P1-101	3110	Project Management - Preliminary Design	Resident Engineers	01-Mar-04 A	17-Sep-09	0.00		
<b>P1-101</b>	<b>3110 - Project Management - Preliminary Design</b>					<b>687.00</b>	<b>\$ 174.67</b>	<b>\$ 120,000</b>
P1-101	3120	Project Technical Support - Preliminary Design		22-Apr-05 A	30-Nov-09			\$ 750,000
P1-101	3120	Project Technical Support - Preliminary Design	Admin Support	22-Apr-05 A	30-Nov-09	128.70		
P1-101	3120	Project Technical Support - Preliminary Design	Communications	22-Apr-05 A	30-Nov-09	0.00		
P1-101	3120	Project Technical Support - Preliminary Design	Construction Support	22-Apr-05 A	30-Nov-09	300.00		
P1-101	3120	Project Technical Support - Preliminary Design	Contracts	22-Apr-05 A	30-Nov-09	63.00		
P1-101	3120	Project Technical Support - Preliminary Design	Electrical	22-Apr-05 A	30-Nov-09	500.00		
P1-101	3120	Project Technical Support - Preliminary Design	Estimator	22-Apr-05 A	30-Nov-09	31.00		
P1-101	3120	Project Technical Support - Preliminary Design	Facility Records&Database	22-Apr-05 A	30-Nov-09	86.00		
P1-101	3120	Project Technical Support - Preliminary Design	I&C	22-Apr-05 A	30-Nov-09	250.00		
P1-101	3120	Project Technical Support - Preliminary Design	Information and Technology	22-Apr-05 A	30-Nov-09	4.00		
P1-101	3120	Project Technical Support - Preliminary Design	Inspection	22-Apr-05 A	30-Nov-09	28.00		
P1-101	3120	Project Technical Support - Preliminary Design	O&M Other	22-Apr-05 A	30-Nov-09	250.00		
P1-101	3120	Project Technical Support - Preliminary Design	O&M Process Engineering	22-Apr-05 A	30-Nov-09	750.00		
P1-101	3120	Project Technical Support - Preliminary Design	Other-Misc.	22-Apr-05 A	30-Nov-09	150.00		
P1-101	3120	Project Technical Support - Preliminary Design	PCI Group	22-Apr-05 A	30-Nov-09	100.00		
P1-101	3120	Project Technical Support - Preliminary Design	PCI-Engineering Support	22-Apr-05 A	30-Nov-09	4.00		
P1-101	3120	Project Technical Support - Preliminary Design	PCI-Programmer	22-Apr-05 A	30-Nov-09	5.00		
P1-101	3120	Project Technical Support - Preliminary Design	Planning	22-Apr-05 A	30-Nov-09	60.50		
P1-101	3120	Project Technical Support - Preliminary Design	PMO/PC	22-Apr-05 A	30-Nov-09	236.19		
P1-101	3120	Project Technical Support - Preliminary Design	Project Engineers	22-Apr-05 A	30-Nov-09	1,000.00		
P1-101	3120	Project Technical Support - Preliminary Design	Project Managers	22-Apr-05 A	30-Nov-09	13.00		
P1-101	3120	Project Technical Support - Preliminary Design	Project Support	22-Apr-05 A	30-Nov-09	50.00		
P1-101	3120	Project Technical Support - Preliminary Design	Resident Engineers	22-Apr-05 A	30-Nov-09	274.00		
P1-101	3120	Project Technical Support - Preliminary Design	Safety	22-Apr-05 A	30-Nov-09	2.50		
<b>P1-101</b>	<b>3120 - Project Technical Support - Preliminary Design</b>					<b>4,285.89</b>	<b>\$ 174.99</b>	<b>\$ 750,000</b>
P1-101	3170	Consultant Selection - Preliminary Design		01-Mar-04 A	23-Jun-05			\$ -
P1-101	3170	Consultant Selection - Preliminary Design	PCI Group	01-Mar-04 A	23-Jun-05	0.00		
P1-101	3170	Consultant Selection - Preliminary Design	PMO/PC	01-Mar-04 A	23-Jun-05	0.00		
P1-101	3170	Consultant Selection - Preliminary Design	Project Engineers	01-Mar-04 A	23-Jun-05	0.00		
P1-101	3170	Consultant Selection - Preliminary Design	Project Managers	01-Mar-04 A	23-Jun-05	7.00		
<b>P1-101</b>	<b>3170 - Consultant Selection - Preliminary Design</b>					<b>0.00</b>		<b>\$ -</b>
P1-101	3180	Facility Records & Database Updates - Preliminary Design		01-Mar-04 A	30-Nov-09 A			\$ 2,000
P1-101	3180	Facility Records & Database Updates - Preliminary Design	Facility Records&Database	01-Mar-04 A	30-Nov-09 A	12.00		
P1-101	3180	Facility Records & Database Updates - Preliminary Design	Planning	01-Mar-04 A	30-Nov-09 A	0.00		
<b>P1-101</b>	<b>3180 - Facility Records &amp; Database Updates - Preliminary Design</b>					<b>12.00</b>	<b>\$ 166.67</b>	<b>\$ 2,000</b>
P1-101	3210	Project Management - Design		24-Dec-09 A	23-Apr-12			\$ 714,552
P1-101	3210	Project Management - Design	Electrical	24-Dec-09 A	23-Apr-12	5.00		
P1-101	3210	Project Management - Design	O&M Other	24-Dec-09 A	23-Apr-12	0.00		
P1-101	3210	Project Management - Design	Project Managers	24-Dec-09 A	23-Apr-12	4,075.00		
P1-101	3210	Project Management - Design	Resident Engineers	24-Dec-09 A	23-Apr-12	3.50		
<b>P1-101</b>	<b>3210 - Project Management - Design</b>					<b>4,083.50</b>	<b>\$ 174.99</b>	<b>\$ 714,552</b>

**P1-101**  
**Sludge Thickening Dewatering and Odor Control at Plant 1**  
**OCSD's Resource Load Report**

Proj No	Cost Codes	Work Package Name	Role	Start Date	Finish Date	Hours Budget	ETC Avg \$/Hr	Project Budget
P1-101	3220	Project Technical Support - Design		22-Jan-10 A	23-Apr-12			\$ 1,280,000
P1-101	3220	Project Technical Support - Design	Admin Support	22-Jan-10 A	23-Apr-12	306.00		
P1-101	3220	Project Technical Support - Design	Communications	22-Jan-10 A	23-Apr-12	100.00		
P1-101	3220	Project Technical Support - Design	Construction Support	22-Jan-10 A	23-Apr-12	201.00		
P1-101	3220	Project Technical Support - Design	Electrical	22-Jan-10 A	23-Apr-12	409.00		
P1-101	3220	Project Technical Support - Design	Estimator	22-Jan-10 A	23-Apr-12	200.00		
P1-101	3220	Project Technical Support - Design	Facility Records&Database	22-Jan-10 A	23-Apr-12	95.50		
P1-101	3220	Project Technical Support - Design	I&C	22-Jan-10 A	23-Apr-12	401.00		
P1-101	3220	Project Technical Support - Design	Inspection	22-Jan-10 A	23-Apr-12	27.00		
P1-101	3220	Project Technical Support - Design	O&M Other	22-Jan-10 A	23-Apr-12	1,002.00		
P1-101	3220	Project Technical Support - Design	O&M Process Engineering	22-Jan-10 A	23-Apr-12	403.50		
P1-101	3220	Project Technical Support - Design	Other-Misc.	22-Jan-10 A	23-Apr-12	400.00		
P1-101	3220	Project Technical Support - Design	PCI Group	22-Jan-10 A	23-Apr-12	200.00		
P1-101	3220	Project Technical Support - Design	PCI-Engineering Support	22-Jan-10 A	23-Apr-12	225.50		
P1-101	3220	Project Technical Support - Design	PCI-Programmer	22-Jan-10 A	23-Apr-12	100.00		
P1-101	3220	Project Technical Support - Design	Planning	22-Jan-10 A	23-Apr-12	150.00		
P1-101	3220	Project Technical Support - Design	PMO/PC	22-Jan-10 A	23-Apr-12	139.75		
P1-101	3220	Project Technical Support - Design	Project Engineers	22-Jan-10 A	23-Apr-12	2,223.41		
P1-101	3220	Project Technical Support - Design	Project Managers	22-Jan-10 A	23-Apr-12	6.00		
P1-101	3220	Project Technical Support - Design	Project Support	22-Jan-10 A	23-Apr-12	315.50		
P1-101	3220	Project Technical Support - Design	Resident Engineers	22-Jan-10 A	23-Apr-12	409.00		
<b>P1-101</b>	<b>3220 - Project Technical Support - Design</b>					<b>7,314.16</b>	<b>\$ 175.00</b>	<b>\$ 1,280,000</b>
P1-101	3259	District Design Reviews - Design		08-Jun-10 A	04-Nov-11			\$ 437,302
P1-101	3259	District Design Reviews - Design	Electrical	08-Jun-10 A	04-Nov-11	300.00		
P1-101	3259	District Design Reviews - Design	I&C	08-Jun-10 A	04-Nov-11	300.00		
P1-101	3259	District Design Reviews - Design	Inspection	08-Jun-10 A	04-Nov-11	160.00		
P1-101	3259	District Design Reviews - Design	O&M Other	08-Jun-10 A	04-Nov-11	500.00		
P1-101	3259	District Design Reviews - Design	O&M Process Engineering	08-Jun-10 A	04-Nov-11	300.00		
P1-101	3259	District Design Reviews - Design	Other-Misc.	08-Jun-10 A	04-Nov-11	200.00		
P1-101	3259	District Design Reviews - Design	Project Engineers	08-Jun-10 A	04-Nov-11	579.00		
P1-101	3259	District Design Reviews - Design	Project Support	08-Jun-10 A	04-Nov-11	0.00		
P1-101	3259	District Design Reviews - Design	Resident Engineers	08-Jun-10 A	04-Nov-11	160.00		
<b>P1-101</b>	<b>3259 - District Design Reviews - Design</b>					<b>2,499.00</b>	<b>\$ 174.99</b>	<b>\$ 437,302</b>
P1-101	3270	Facility Records & Database Updates - Design		24-Dec-09 A	21-Nov-11			\$ 30,000
P1-101	3270	Facility Records & Database Updates - Design	Facility Records&Database	24-Dec-09 A	21-Nov-11	240.00		
<b>P1-101</b>	<b>3270 - Facility Records &amp; Database Updates - Design</b>					<b>240.00</b>	<b>\$ 125.00</b>	<b>\$ 30,000</b>
P1-101	3273	Construction Bid and Award		22-Nov-11	03-Apr-12			\$ 75,000
P1-101	3273	Construction Bid and Award	Admin Support	22-Nov-11	03-Apr-12	0.00		
P1-101	3273	Construction Bid and Award	Contracts	22-Nov-11	03-Apr-12	0.00		
P1-101	3273	Construction Bid and Award	Other-Misc.	22-Nov-11	03-Apr-12	0.00		
P1-101	3273	Construction Bid and Award	Project Support	22-Nov-11	03-Apr-12	0.00		
<b>P1-101</b>	<b>3273 - Construction Bid and Award</b>					<b>0.00</b>	<b>\$ -</b>	<b>\$ 75,000</b>
P1-101	3310	Project Management - Construction		24-Apr-12	23-Jun-15			\$ 481,146
P1-101	3310	Project Management - Construction	Project Managers	24-Apr-12	23-Jun-15	2,887.50		
<b>P1-101</b>	<b>3310 - Project Management - Construction</b>					<b>2,887.50</b>	<b>\$ 166.63</b>	<b>\$ 481,146</b>
P1-101	3410	Project Management - Commissioning		21-Feb-14	23-Jun-15			\$ 70,000
P1-101	3410	Project Management - Commissioning	Project Managers	21-Feb-14	23-Jun-15	0.00		
<b>P1-101</b>	<b>3410 - Project Management - Commissioning</b>					<b>0.00</b>	<b>\$ -</b>	<b>\$ 70,000</b>



**P1-101**  
**Sludge Thickening Dewatering and Odor Control at Plant 1**  
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Proj No	Cost Codes	Work Package Name	Role	Start Date	Finish Date	Hours Budget	ETC Avg \$/Hr	Project Budget
P1-101	3510	Project Management - Close-Out		22-Jun-15	20-Jul-16			\$ 40,000
P1-101	3510	Project Management - Close-Out	Project Managers	22-Jun-15	20-Jul-16	287.00		
<b>P1-101</b>	<b>3510</b>	<b>- Project Management - Close-Out</b>				<b>287.00</b>	<b>\$ 139.37</b>	<b>\$ 40,000</b>
<b>P1-101</b>	<b>(a)</b>	<b>Direct Project Administration Costs Total</b>				<b>22,303.05</b>		<b>\$ 4,000,000</b>
<b>P1-101</b>	<b>(b)</b>	<b>Land Purchase/Easement Total</b>						
P1-101		Land Purchases/Easements - not applicable ; OCSD owns land		01-Jan-54	01-Jan-54			
<b>P1-101</b>	<b>-</b>	<b>Land Purchases/Easements - not applicable ; OCSD owns land</b>				<b>0.00</b>		<b>\$ -</b>
<b>P1-101</b>	<b>(b)</b>	<b>Land Purchase/Easement Total</b>				<b>0.00</b>		<b>\$ -</b>
<b>P1-101</b>	<b>(c)</b>	<b>Planning/Design/Engineering/Environmental Documentation Total</b>						
P1-101	3000	Project Development		18-Aug-03 A	12-Jan-05 A			\$ -
<b>P1-101</b>	<b>3000</b>	<b>- Project Development</b>				<b>0.00</b>		<b>\$ -</b>
P1-101	3100	Preliminary Design		22-Apr-05 A	13-Sep-05 A			\$ -
<b>P1-101</b>	<b>3100</b>	<b>- Preliminary Design</b>				<b>0.00</b>		<b>\$ -</b>
P1-101	3141	Engineering Study #1		21-Jun-05 A	20-Nov-08 A			\$ 50,000
<b>P1-101</b>	<b>3141</b>	<b>- Engineering Study #1</b>				<b>0.00</b>		<b>\$ 50,000</b>
P1-101	3143	New Equipment Studies/Testing		23-Aug-05 A	01-Apr-09 A			\$ 25,000
<b>P1-101</b>	<b>3143</b>	<b>- New Equipment Studies/Testing</b>				<b>0.00</b>		<b>\$ 25,000</b>
P1-101	3146	Preliminary Design Report		30-Aug-07 A	30-Nov-09 A			\$ -
<b>P1-101</b>	<b>3146</b>	<b>- Preliminary Design Report</b>				<b>0.00</b>		<b>\$ -</b>
P1-101	3200	Design		24-Dec-09 A	31-Aug-10 A			\$ 2,618
<b>P1-101</b>	<b>3200</b>	<b>- Design</b>				<b>0.00</b>		<b>\$ 2,618</b>
P1-101	3250	Consultant Services - Design		24-Dec-09 A	21-Nov-11			\$ 1,589,260
<b>P1-101</b>	<b>3250</b>	<b>- Consultant Services - Design</b>				<b>0.00</b>		<b>\$ 1,589,260</b>
P1-101	3251	Design Submittal 1		24-Dec-09 A	29-Jul-10 A			\$ 1,018,941
<b>P1-101</b>	<b>3251</b>	<b>- Design Submittal 1</b>				<b>0.00</b>		<b>\$ 1,018,941</b>
P1-101	3252	Design Submittal 2		08-Jul-10 A	25-Feb-11			\$ 407,497
<b>P1-101</b>	<b>3252</b>	<b>- Design Submittal 2</b>				<b>0.00</b>		<b>\$ 407,497</b>
P1-101	3253	Design Submittal 3		01-Mar-11	30-Dec-11			\$ 1,686,837
<b>P1-101</b>	<b>3253</b>	<b>- Design Submittal 3</b>				<b>0.00</b>		<b>\$ 1,686,837</b>
P1-101	3254	Bid Support Services and Solicitation		22-Nov-11	02-Apr-12			\$ 559,920
<b>P1-101</b>	<b>3254</b>	<b>- Bid Support Services and Solicitation</b>				<b>0.00</b>		<b>\$ 559,920</b>
P1-101	3258	CEQA/NEPA Environmental Documentation		24-Dec-09 A	25-Feb-11			\$ 200,000
<b>P1-101</b>	<b>3258</b>	<b>- CEQA/NEPA Environmental Documentation</b>				<b>0.00</b>		<b>\$ 200,000</b>
P1-101	3299	EPA Funding - Project Financing		02-Jun-06	02-Mar-11			\$ 2,025,000
<b>P1-101</b>	<b>3299</b>	<b>- EPA Funding - Project Financing</b>				<b>0.00</b>		<b>\$ 2,025,000</b>
P1-101	3300	Construction & Installation		24-Apr-12	23-Jun-15			\$ 527
<b>P1-101</b>	<b>3300</b>	<b>- Construction &amp; Installation</b>				<b>0.00</b>		<b>\$ 527</b>
<b>P1-101</b>	<b>(c)</b>	<b>Planning/Design/Engineering/Environmental Documentation Total</b>				<b>0.00</b>		<b>\$ 7,565,600</b>
<b>P1-101</b>	<b>(d)</b>	<b>Construction/Implementation Total</b>						
P1-101	3360	Contractor Work - Construction		24-Apr-12	04-Aug-15			\$ 102,000,000
<b>P1-101</b>	<b>3360</b>	<b>- Contractor Work - Construction</b>				<b>0.00</b>		<b>\$ 102,000,000</b>
P1-101	3460	Contractor Work - Submittals/Test Reports/Warranty/Testing/Commissioning		21-Feb-14	23-Jun-15			\$ 750,000
<b>P1-101</b>	<b>3460</b>	<b>- Contractor Work - Submittals/Test Reports/Warranty/Testing/Commissioning</b>				<b>0.00</b>		<b>\$ 750,000</b>
P1-101	3480	Proposition 84 Funding - Project Financing		01-Jun-11	01-Jun-14			\$ 1,000,000
<b>P1-101</b>	<b>3480</b>	<b>- Proposition 84 Funding - Project Financing</b>				<b>0.00</b>		<b>\$ 1,000,000</b>
P1-101	3560	Contractor Work - Close-Out		22-Jun-15	21-Jul-15			\$ 250,000
<b>P1-101</b>	<b>3560</b>	<b>- Contractor Work - Close-Out</b>				<b>0.00</b>		<b>\$ 250,000</b>
<b>P1-101</b>	<b>(d)</b>	<b>Construction/Implementation Total</b>				<b>0.00</b>		<b>\$ 104,000,000</b>



**P1-101**  
**Sludge Thickening Dewatering and Odor Control at Plant 1**  
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Proj No	Cost Codes	Work Package Name	Role	Start Date	Finish Date	Hours Budget	ETC Avg \$/Hr	Project Budget
<b>P1-101</b>		<b>(e) Environmental Compliance/Mitigation/Enhancement Total</b>						
P1-101	3358	Environmental Compliance/Mitigation/Enhancement		24-Apr-12	24-Apr-12			\$ 200,000
P1-101	3358	Environmental Compliance/Mitigation/Enhancement	Resident Engineers	24-Apr-12	24-Apr-12	1,344.00		
<b>P1-101</b>	<b>3358 - Environmental Compliance/Mitigation/Enhancement</b>					<b>1,344.00</b>	<b>\$ 148.81</b>	<b>\$ 200,000</b>
<b>P1-101</b>		<b>(e) Environmental Compliance/Mitigation/Enhancement Total</b>				<b>1,344.00</b>		<b>\$ 200,000</b>
<b>P1-101</b>		<b>(f) Construction Administration Total</b>						
P1-101	3320	Project Technical Support - Construction		24-Apr-12	23-Jun-15			\$ 3,431,750
P1-101	3320	Project Technical Support - Construction	Admin Support	24-Apr-12	23-Jun-15	1,000.00		
P1-101	3320	Project Technical Support - Construction	Communications	24-Apr-12	23-Jun-15	0.00		
P1-101	3320	Project Technical Support - Construction	Construction Support	24-Apr-12	23-Jun-15	1,000.00		
P1-101	3320	Project Technical Support - Construction	Electrical	24-Apr-12	23-Jun-15	1,501.00		
P1-101	3320	Project Technical Support - Construction	Estimator	24-Apr-12	23-Jun-15	1,000.00		
P1-101	3320	Project Technical Support - Construction	Facility Records&Database	24-Apr-12	23-Jun-15	0.00		
P1-101	3320	Project Technical Support - Construction	I&C	24-Apr-12	23-Jun-15	1,000.00		
P1-101	3320	Project Technical Support - Construction	Information and Technology	24-Apr-12	23-Jun-15	100.00		
P1-101	3320	Project Technical Support - Construction	Inspection	24-Apr-12	23-Jun-15	494.00		
P1-101	3320	Project Technical Support - Construction	O&M Other	24-Apr-12	23-Jun-15	1,700.00		
P1-101	3320	Project Technical Support - Construction	O&M Process Engineering	24-Apr-12	23-Jun-15	1,001.00		
P1-101	3320	Project Technical Support - Construction	Other-Misc.	24-Apr-12	23-Jun-15	299.00		
P1-101	3320	Project Technical Support - Construction	Planning	24-Apr-12	23-Jun-15	100.00		
P1-101	3320	Project Technical Support - Construction	PMO/PC	24-Apr-12	23-Jun-15	330.00		
P1-101	3320	Project Technical Support - Construction	Project Engineers	24-Apr-12	23-Jun-15	2,500.00		
P1-101	3320	Project Technical Support - Construction	Project Support	24-Apr-12	23-Jun-15	733.00		
P1-101	3320	Project Technical Support - Construction	Resident Engineers	24-Apr-12	23-Jun-15	10,000.00		
<b>P1-101</b>	<b>3320 - Project Technical Support - Construction</b>					<b>22,758.00</b>	<b>\$ 150.79</b>	<b>\$ 3,431,750</b>
P1-101	3321	PCI Support - Construction		24-Apr-12	23-Jun-15			\$ 625,000
P1-101	3321	PCI Support - Construction	PCI Group	24-Apr-12	23-Jun-15	1,582.00		
P1-101	3321	PCI Support - Construction	PCI-Engineering Support	24-Apr-12	23-Jun-15	803.00		
P1-101	3321	PCI Support - Construction	PCI-Programmer	24-Apr-12	23-Jun-15	2,853.00		
<b>P1-101</b>	<b>3321 - PCI Support - Construction</b>					<b>5,238.00</b>	<b>\$ 119.32</b>	<b>\$ 625,000</b>
P1-101	3350	Consultant Services - Construction		24-Apr-12	23-Jun-15			\$ 4,000,000
<b>P1-101</b>	<b>3350 - Consultant Services - Construction</b>					<b>0.00</b>	<b>\$ -</b>	<b>\$ 4,000,000</b>
P1-101	3362	Inspection - Construction		24-Apr-12	23-Jun-15			\$ 2,175,000
P1-101	3362	Inspection - Construction	Inspection	24-Apr-12	23-Jun-15	18,041.00		
<b>P1-101</b>	<b>3362 - Inspection - Construction</b>					<b>18,041.00</b>	<b>\$ 120.56</b>	<b>\$ 2,175,000</b>
P1-101	3363	Testing		24-Apr-12	23-Jun-15			\$ 400,000
<b>P1-101</b>	<b>3363 - Testing</b>					<b>0.00</b>	<b>\$ -</b>	<b>\$ 400,000</b>
P1-101	3370	Facility Record & Database Updates - Construction		24-Apr-12	23-Jun-15			\$ 24,000
P1-101	3370	Facility Record & Database Updates - Construction	Facility Records&Database	24-Apr-12	23-Jun-15	200.00		
<b>P1-101</b>	<b>3370 - Facility Record &amp; Database Updates - Construction</b>					<b>200.00</b>	<b>\$ 120.00</b>	<b>\$ 24,000</b>
P1-101	3420	Project Technical Support - Commissioning		21-Feb-14	23-Jun-15			\$ 615,000
P1-101	3420	Project Technical Support - Commissioning	Admin Support	21-Feb-14	23-Jun-15	150.00		
P1-101	3420	Project Technical Support - Commissioning	Construction Support	21-Feb-14	23-Jun-15	0.00		
P1-101	3420	Project Technical Support - Commissioning	Electrical	21-Feb-14	23-Jun-15	200.00		
P1-101	3420	Project Technical Support - Commissioning	I&C	21-Feb-14	23-Jun-15	0.00		
P1-101	3420	Project Technical Support - Commissioning	O&M Other	21-Feb-14	23-Jun-15	1,000.00		
P1-101	3420	Project Technical Support - Commissioning	O&M Process Engineering	21-Feb-14	23-Jun-15	600.00		
P1-101	3420	Project Technical Support - Commissioning	Planning	21-Feb-14	23-Jun-15	0.00		

**P1-101**  
**Sludge Thickening Dewatering and Odor Control at Plant 1**  
**OCSD's Resource Load Report**

Proj No	Cost Codes	Work Package Name	Role	Start Date	Finish Date	Hours Budget	ETC Avg \$/Hr	Project Budget
P1-101	3420	Project Technical Support - Commissioning	PMO/PC	21-Feb-14	23-Jun-15	0.00		
P1-101	3420	Project Technical Support - Commissioning	Project Engineers	21-Feb-14	23-Jun-15	500.00		
P1-101	3420	Project Technical Support - Commissioning	Project Support	21-Feb-14	23-Jun-15	0.00		
P1-101	3420	Project Technical Support - Commissioning	Resident Engineers	21-Feb-14	23-Jun-15	0.00		
<b>P1-101</b>	<b>3420 - Project Technical Support - Commissioning</b>					<b>2,450.00</b>	<b>\$ 251.02</b>	<b>\$ 615,000</b>
P1-101	3421	PCI Support - Commissioning		21-Feb-14	23-Jun-15			\$ 240,000
P1-101	3421	PCI Support - Commissioning	PCI Group	21-Feb-14	23-Jun-15	500.00		
P1-101	3421	PCI Support - Commissioning	PCI-Engineering Support	21-Feb-14	23-Jun-15	500.00		
P1-101	3421	PCI Support - Commissioning	PCI-Programmer	21-Feb-14	23-Jun-15	500.00		
P1-101	3421	PCI Support - Commissioning	PCI-Startup	21-Feb-14	23-Jun-15	500.00		
<b>P1-101</b>	<b>3421 - PCI Support - Commissioning</b>					<b>2,000.00</b>	<b>\$ 120.00</b>	<b>\$ 240,000</b>
P1-101	3422	O&M Training - Commissioning		21-Feb-14	23-Jun-15			\$ 100,000
P1-101	3422	O&M Training - Commissioning	O&M Other	21-Feb-14	23-Jun-15	450.00		
P1-101	3422	O&M Training - Commissioning	O&M Process Engineering	21-Feb-14	23-Jun-15	150.00		
P1-101	3422	O&M Training - Commissioning	Resident Engineers	21-Feb-14	23-Jun-15	200.00		
<b>P1-101</b>	<b>3422 - O&amp;M Training - Commissioning</b>					<b>800.00</b>	<b>\$ 125.00</b>	<b>\$ 100,000</b>
P1-101	3450	Consultant Services - Commissioning		21-Feb-14	23-Jun-15			\$ 992,250
<b>P1-101</b>	<b>3450 - Consultant Services - Commissioning</b>					<b>0.00</b>	<b>\$ -</b>	<b>\$ 992,250</b>
P1-101	3462	Inspection - Commissioning		21-Feb-14	23-Jun-15			\$ 300,000
P1-101	3462	Inspection - Commissioning	Inspection	21-Feb-14	23-Jun-15	2,496.00		
<b>P1-101</b>	<b>3462 - Inspection - Commissioning</b>					<b>2,496.00</b>	<b>\$ 120.19</b>	<b>\$ 300,000</b>
P1-101	3520	Project Technical Support - Close-Out		22-Jun-15	19-Jan-16			\$ 60,000
P1-101	3520	Project Technical Support - Close-Out	Construction Support	22-Jun-15	19-Jan-16	25.00		
P1-101	3520	Project Technical Support - Close-Out	Electrical	22-Jun-15	19-Jan-16	30.00		
P1-101	3520	Project Technical Support - Close-Out	Estimator	22-Jun-15	19-Jan-16	0.00		
P1-101	3520	Project Technical Support - Close-Out	I&C	22-Jun-15	19-Jan-16	50.00		
P1-101	3520	Project Technical Support - Close-Out	PMO/PC	22-Jun-15	19-Jan-16	25.00		
P1-101	3520	Project Technical Support - Close-Out	Project Engineers	22-Jun-15	19-Jan-16	70.00		
P1-101	3520	Project Technical Support - Close-Out	Project Support	22-Jun-15	19-Jan-16	0.00		
P1-101	3520	Project Technical Support - Close-Out	Resident Engineers	22-Jun-15	19-Jan-16	200.00		
<b>P1-101</b>	<b>3520 - Project Technical Support - Close-Out</b>					<b>400.00</b>	<b>\$ 150.00</b>	<b>\$ 60,000</b>
P1-101	3570	Facility Record & Database Updates - Close-Out		22-Jun-15	19-Jan-16			\$ 37,000
P1-101	3570	Facility Record & Database Updates - Close-Out	Facility Records&Database	22-Jun-15	19-Jan-16	316.00		
<b>P1-101</b>	<b>3570 - Facility Record &amp; Database Updates - Close-Out</b>					<b>316.00</b>	<b>\$ 117.09</b>	<b>\$ 37,000</b>
<b>P1-101</b>	<b>(f) Construction Administration Total</b>					<b>54,699.00</b>		<b>\$ 13,000,000</b>
<b>P1-101</b>	<b>(g) Legal Costs Total</b>							
P1-101	3290	Legal Costs Including Permit Acquisitions		08-Jul-10 A	21-Nov-11			\$ 100,000
<b>P1-101</b>	<b>3290 - Legal Costs Including Permit Acquisitions</b>					<b>0.00</b>		<b>\$ 100,000</b>
P1-101	3390	Legal Costs		24-Apr-12	23-Jun-15			\$ 150,000
<b>P1-101</b>	<b>3390 - Legal Costs</b>					<b>0.00</b>		<b>\$ 150,000</b>
<b>P1-101</b>	<b>(g) Legal Costs Total</b>					<b>0.00</b>		<b>\$ 250,000</b>
<b>P1-101</b>	<b>(h) Construction/Implementation Contingency Total</b>							
P1-101	3600	Construction/Implementation Contingency		24-Apr-12	23-Jun-15			\$ 10,100,000
<b>P1-101</b>	<b>3600 - Construction/Implementation Contingency</b>					<b>0.00</b>		<b>\$ 10,100,000</b>
<b>P1-101</b>	<b>(h) Construction/Implementation Contingency Total</b>					<b>0.00</b>		<b>\$ 10,100,000</b>
	<b>Grand Total</b>					<b>78,346.05</b>		<b>\$ 139,115,600 <sup>1</sup></b>

<sup>1</sup> The total amount for the P1-101 Project costs is estimated at \$143,550,000. This amount has been adjusted for unrecoverable costs incurred prior to September 30, 2008. After adjustments, the total estimated cost for the P1-101 Project is \$137,115,600.

## 2.0 Cost, Schedule, and Prioritization Methodology Summary

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### 2.1 Cost Estimating Methodology

Project costs consist of:

- Construction costs
- Nonconstruction costs (staff and consultant costs to execute and support all project phases)
- Cost of land and/or easements
- Contingency

Nonconstruction costs and contingency are calculated as a percentage of construction costs; therefore, the first step was to validate the construction cost estimates. The approach taken to validate these cost estimates depended on the current project phase.

#### 2.1.1 Construction Costs Estimate

For projects currently in construction, the contract amount was used as the base cost and adjusted for any potential or pending changes.

For projects in design with an engineer's estimate, the estimate was reviewed for any obvious inconsistencies in scope, quantity takeoffs of major material, unit costs or general conditions, overhead and profit, bonds and insurance. Adjustments were made where necessary. If an engineer's estimate was not available, any plans that were available were reviewed; and the project was broken into major elements or components. Available industry cost standards and published data available at OCSD were used, where appropriate, to develop a planning level estimate.

For projects in preliminary design or that have not started yet, all project-related published data were reviewed; and industry cost standards were used. Where not available for a project element, cost tables were developed based on OCSD 1999 Strategic Plan data, past project costs, and other technical information. Quantity takeoffs were used for collection system projects; and, if there were design alternatives, the most conservative method was estimated.

In all cases, 0 to 15 percent allowance was added as a percentage of the aggregate cost estimate based on several factors, including phase of the project; technical information about the project that was available; and, in some cases, for specific elements of work that may be part of the final design (i.e., dewatering and subsurface stabilization).

Finally, in all cases, the individual validation sheets indicate a confidence level the estimator had in the cost estimate that was produced based on professional experience. This

confidence level should be viewed in the context of determining if adjustments should be made to the construction cost estimate, or allowances, of any specific project.

## 2.1.2 Nonconstruction Cost Estimates

Appendix A contains Technical Memorandum No. 1 that describes in detail the methodology used for cost validation and estimating. It includes a discussion on the use of OCSD cost data for past projects. This information was used in an attempt to determine a percent of construction for the various categories of nonconstruction costs by project phase. For several reasons, it was difficult to arrive at a historical metric with a high level of confidence. First, OCSD has adopted a new WBS structure for project management and construction. The new structure includes new definitions of several phases, so historical data are not easily applied to the new phases. Secondly, the CIP consists of a wide range of project types and sizes (in scope and dollars), which leads to a wide variation in costs expressed as a percentage of construction costs. Thirdly, OCSD has implemented project controls within the financial system within the past 4 years, so a relatively short history is available electronically. Lastly, the newly adopted design standards have not shown how they will impact the cost of design or construction.

Therefore, a range of percentages was developed and compared to subjective “industry” standards with some limited data available from other CIP programs. The historical data available indicate a range of 26 to 55 percent for nonconstruction costs with a median of 46 percent. Based on the reasons stated above, and data from other programs, a total percentage of 41.5 percent is recommended for nonconstruction costs. This percentage was broken down between OCSD staff and outside (consultant) services for each project phase as shown in Table 2-1.

TABLE 2-1  
Nonconstruction Costs as a Percent of Construction Costs

Phase	Nonconstruction Cost as % of Construction (OCSD/Outside Split)
1. Project Development	2% (2 / 0)
2. Preliminary Design	3% (2 / 1)
3. Design	18% (6 / 12)
4. Construction	16% (10 / 6)
5. Commission	2% (1 / 1)
6. Closeout	0.5% (0.25 / 0.25)
Total (w/o contingency)	41.5%

There were several significant exceptions made. When reviewing the results of this approach, the larger projects exhibited substantial cost estimates for OCSD staff and for design support during construction. Recognizing that the percentage of nonconstruction costs will not be precisely linear as construction costs increase, these cost estimates were reviewed and, for the 15 largest projects, adjusted based on the following criteria:

- Phase 1: If no feasibility study was identified in the validation sheet as being needed, the percentage for OCSD staff was reduced to 0.5 percent.
- Phase 2: The percentage for OCSD staff was reduced to 0.5 percent.
- Phase 3: The percentage for OCSD staff was reduced to 2 percent.
- Phase 4: For Outside Services, the percentage was reduced to 5 percent.
- Phase 5: The percentage for OCSD and Outside Services each was reduced to 0.5 percent.
- Phase 6: The percentage for OCSD staff and for Outside Services each was reduced to 0.125 percent.

The above-mentioned reduction in nonconstruction cost reduced the overall nonconstruction cost estimate from 41.5 to 28.5 percent.

Conversely, the standard percentages do not work for smaller constructed cost value projects. Within each phase, there are required activities that demand a certain level of effort, regardless of the size of the project. The standard percentages do not provide adequate budgets. Generally, projects with constructed value less than \$4 million are affected. Minimum budgets for OCSD staff costs have been developed and applied to the smaller-value projects.

Appendix A contains a more complete discussion of these nonconstruction percentages.

### 2.1.3 Cost of Land

When land acquisition was considered to be needed, an estimate was added for the cost of land. This was applied primarily to the pumping stations. For pipelines, an estimate was added for the cost of construction easements.

### 2.1.4 Contingency

Project contingency is needed to account for unknown events or project risks that cannot be quantified, but could affect any part of the project cost. The amount of contingency depends on the project phase and ranges from 10 percent (Phase 4) to 30 percent (Phases 1 and 2). As construction nears completion, the unused contingency can be reduced further based on project circumstances. A higher percentage of contingency is needed in early project phases (planning and design) because the full project scope may not yet be defined, the impacts of regulatory and/or land requirements may not be fully known, the design and construction contracts are not yet fixed, and the design itself may not be sufficiently developed.

## 2.2 Schedule Development Methodology

Schedule durations were reviewed, adjusted, or developed for each project according to the newly adopted WBS structure. This structure has six phases:

- Phase 1: Project Development
- Phase 2: Preliminary Design
- Phase 3: Design

- Phase 4: Construction and Installation
- Phase 5: Commission
- Phase 6: Closeout

Figure 2-1 shows the CIP work breakdown structure. It illustrates the general categories of work in each phase. The work involved in each of these phases and the type and size of the project were the basis for establishing durations for each phase.

In particular, it is important to note that the preliminary design phase includes consultant selection and procurement; and the design phase includes advertising and awarding the construction contract, including all activities that precede the construction contract Notice to Proceed. This is important because of the time needed for these procurement activities. Based on the public work contract code and OCSD's work processes for these activities and lead times for Board action, as much as 6 months must be scheduled for each procurement (see Appendix F for standard OSCD Request for Proposal [RFP] and Bid/ Award timelines). For instance, when an 18-month duration is shown for design, 6 months is for procurement, leaving 12 months for design activities. All phases are linear, except that Phase 5 will overlap the end of Phase 4.

In most cases, the rule of thumb used for Project Development (Phase 1) duration was 6 to 12 months, depending on whether a feasibility study was needed. For Predesign (Phase 2), a 12-month duration was generally used. For Design (Phase 3), 18 to 24 months generally were used for pipelines and pumping stations and smaller plant projects, with longer durations for large projects.

For Construction (Phase 4), a more detailed analysis was conducted, recognizing that without complete design plans a wide range of assumptions was necessary.

**Collection System:** The scope of work (as known today), mobilization and demobilization, possible restrictions on work hours, potential impacts due to regulatory requirements, and special methods (bore and jack, dewatering, etc.) all were factored into the project manager's and validator's collective experience and past OCSD project history.

**Plant Projects:** The scope of work and major project elements formed the basis of the estimate. Equipment delivery durations, possible magnitude of earthwork and dewatering, other unique site conditions, possible regulatory requirements, startup, testing requirements, and plant operating constraints were considered, along with the project manager's and validator's experience and past OCSD project history. In addition, the full secondary treatment projects were subjected to a risk analysis as well as a Peer Review (see Appendix C). The results of these activities were used to further refine the schedules of these projects.

Predecessor and successor relationships were applied among projects, particularly the treatment plant projects. Where project interdependencies were known, their impacts were factored in.

The duration for Commissioning (Phase 5) was a function of the type of project and, therefore, the amount of commissioning activities required. It was assumed a plant project, with instrumentation, supervisory control and data acquisition (SCADA), and mechanical and electrical systems, will take more time than a pipeline project.

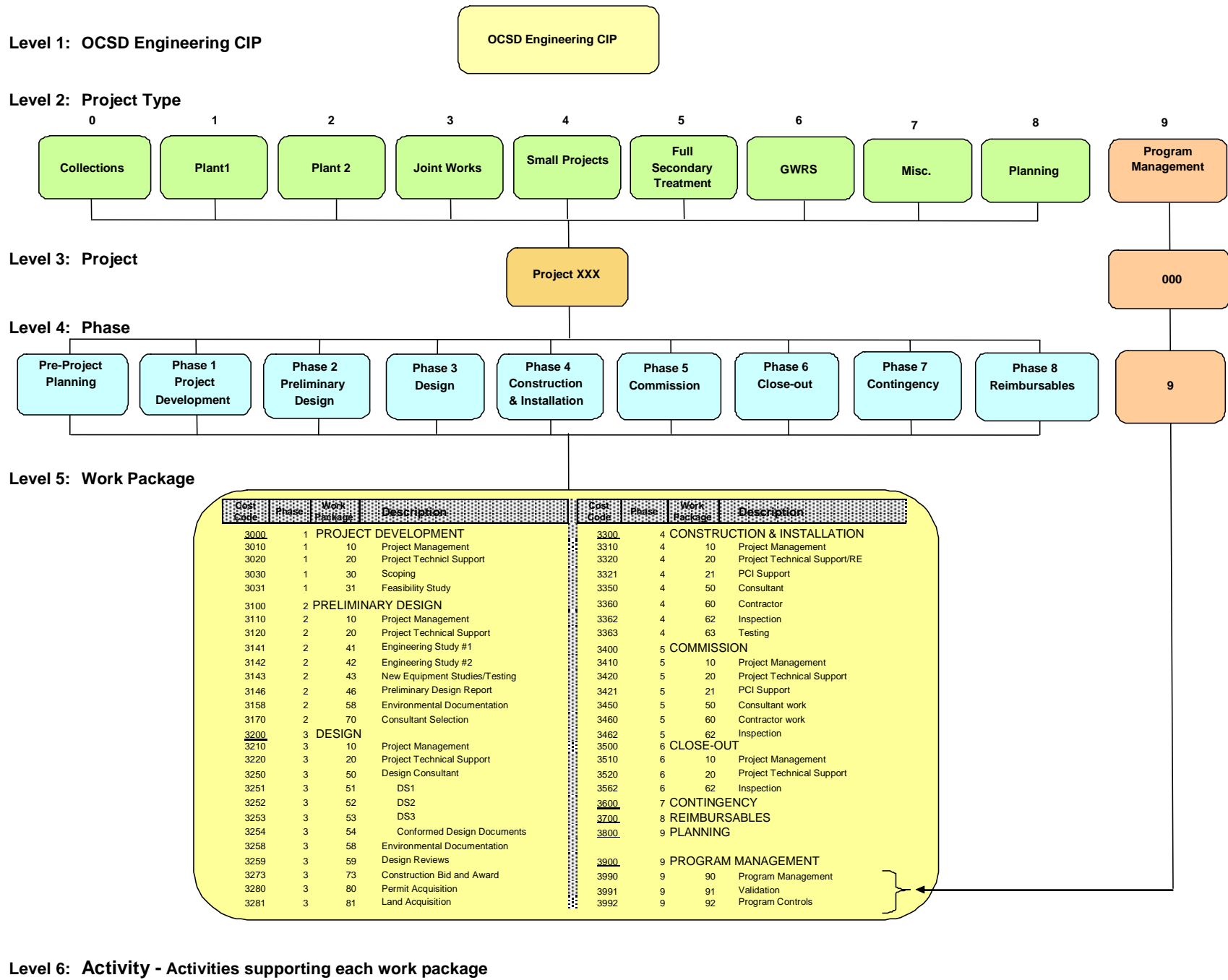


Figure 2-1. CIP Work Breakdown Structure

Closeout (Phase 6) includes some standard contract closeout activities, but the main driver of the duration is a 12-month warranty period; therefore, it could not be concluded until that period had expired.

As with cost estimating, there are exceptions to these general rules. These exceptions are primarily with the full secondary projects. These projects are recommended to be scheduled as a group at each plant. There are interdependencies between projects that require abbreviated phase schedules in some cases. In addition, the results of a Peer Review effort and an abbreviated risk analysis lead to the durations for each of these projects. The prioritization process described below and a recognition to expedite the full secondary program also factors in scheduling the full secondary projects.

Other peculiarities related to schedules are addressed on the validation summary sheets in Section 3, Project Validation Summary Sheets.

### 2.2.1 Project Prioritization

Concurrent with the validation of the individual project schedules, a process to develop principles/values and criteria for a benefits ranking of the projects was conducted. The goals of this exercise were to develop the principles that govern the mission of the OCSD's CIP, identify criteria appropriate to measure progress towards these principles, and weight these criteria on their relative importance. The criteria were applied to each project through a structured data gathering process. The result was a ranking of projects according to the benefits derived from the weighted criteria within three distinct planning horizons.

Planning Horizon 1 is for projects needed within the next 5 years, Planning Horizon 2 is a 5- to 10-year period, and Planning Horizon 3 is for projects that are not needed until years 10 to 15. Appendix B contains Technical Memorandum No. 2 that describes in detail the CIP prioritization process.

Within Planning Horizon 1, the majority of the projects selected met the more immediate benefits of safety, compliance, and avoidance of spills and failures. Within Planning Horizon 2 projects, safety, compliance, and avoidance of spills and failures were still predominant; but reducing O&M costs and solving capacity needs were also significant criteria. By Planning Horizon 3, safety and avoidance of spills and failures is no longer significant (these benefits have been met in earlier horizons); and they are replaced by projects with demonstrated technology improvements and further reduction of O&M costs. The prioritization process and the full results can be found in Technical Memorandum No. 3 and Appendix B.

The master schedule included in Section 4 of this report shows the projects by WBS (i.e., the category [type] of project).

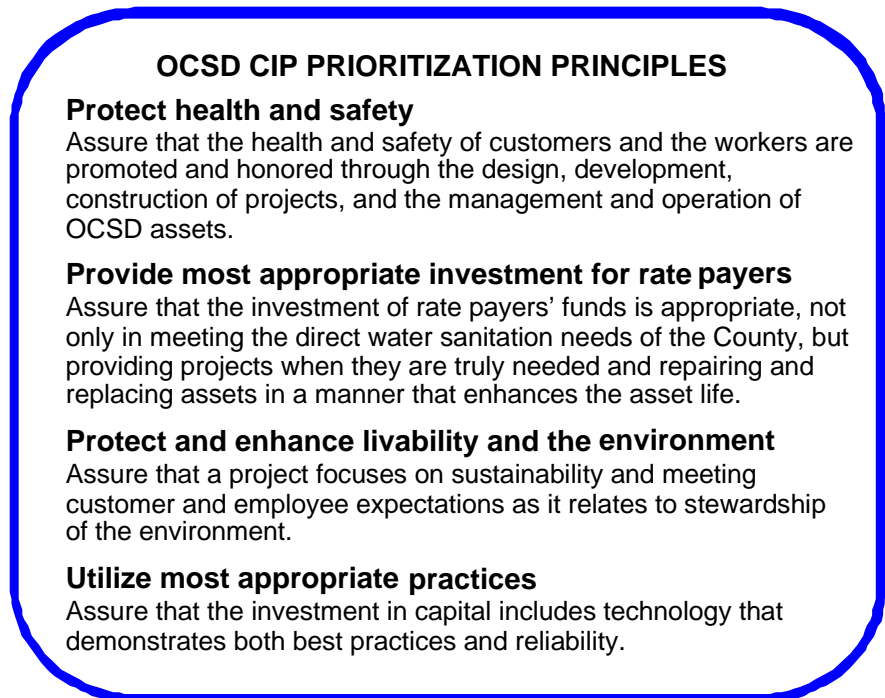
A single summary bar is shown for each project that includes all six phases. Schedules by phase are provided on each CIP Validation Detail Sheet in Section 3, Project Validation Summary Sheets. All schedules are based on a 5-day work week.



## 2.3 Project Benefits and Priorities

A very significant factor in the development of validated projects and their proposed time frame was the determination of which projects brought the most benefit to OCSD. All project proponents believe their project should be given priority in the plan; however, OCSD obviously cannot accomplish everything at once. So there must be some prioritization.

To make schedule recommendations and give OCSD a framework for making priority decisions, a series of workshops was held with key OCSD staff to develop the principles and values that are most important and convert these into weighted criteria for ranking the relative benefits of proposed projects. The details of this process are described in Appendix B. The principles that were developed are shown in Figure 2-2.



**Figure 2-2. CIP Prioritization Principles**

From these principles, criteria were developed that measured project benefits relative to these principles. In essence, the principles were converted into criteria that could be measured and weighted. As described in Technical Memorandum No. 2, these criteria were reviewed, modified, and reweighted on several occasions until the final criteria and weights were reached as shown in Table 2-2.

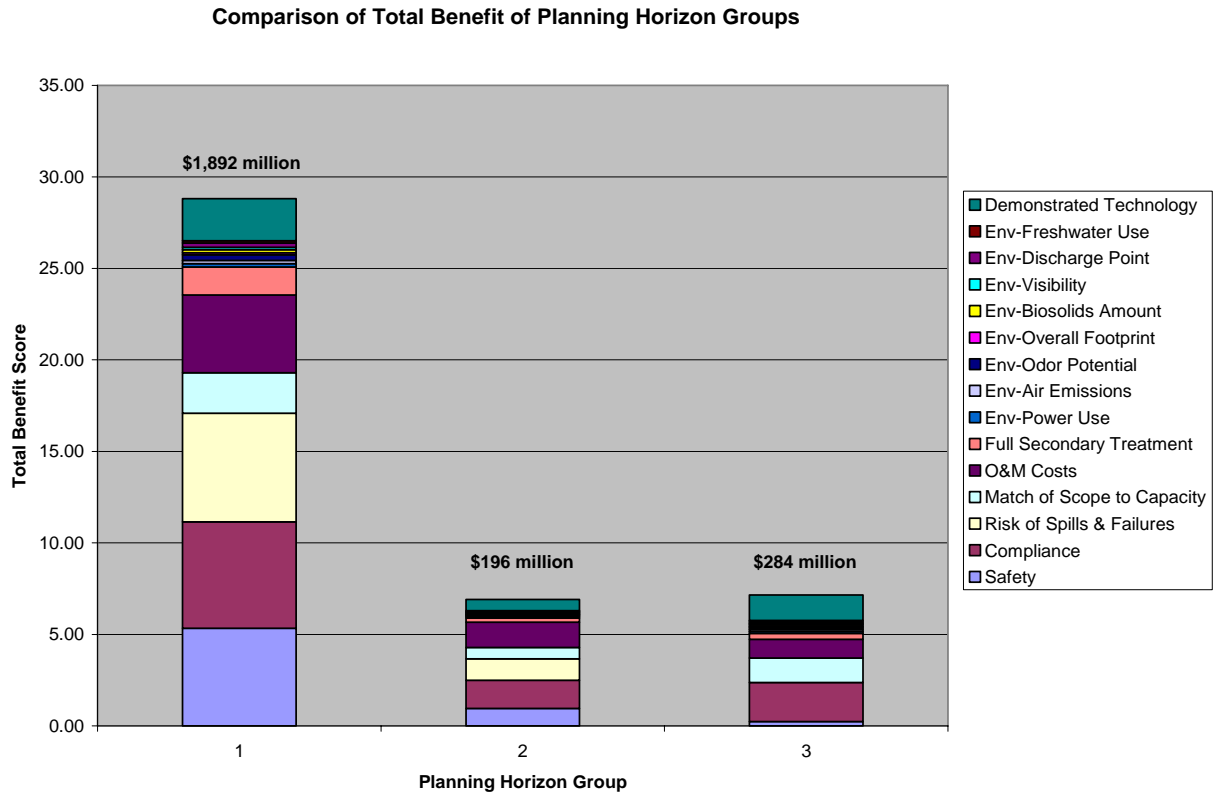
**TABLE 2-2**  
**Priority Criteria and Weighting**

<b>Criteria</b>	<b>Weight</b>
Risk of spills and failures	20.9
Compliance with standards/regulations	18.8
Internal safety	15.9
Operations and maintenance costs	12.4
Advancement of full secondary treatment	10.9
Impacts to environment, community, etc.	9.9
Match of scope to capacity requirements	6.4
Use of demonstrated or proven technology	4.8

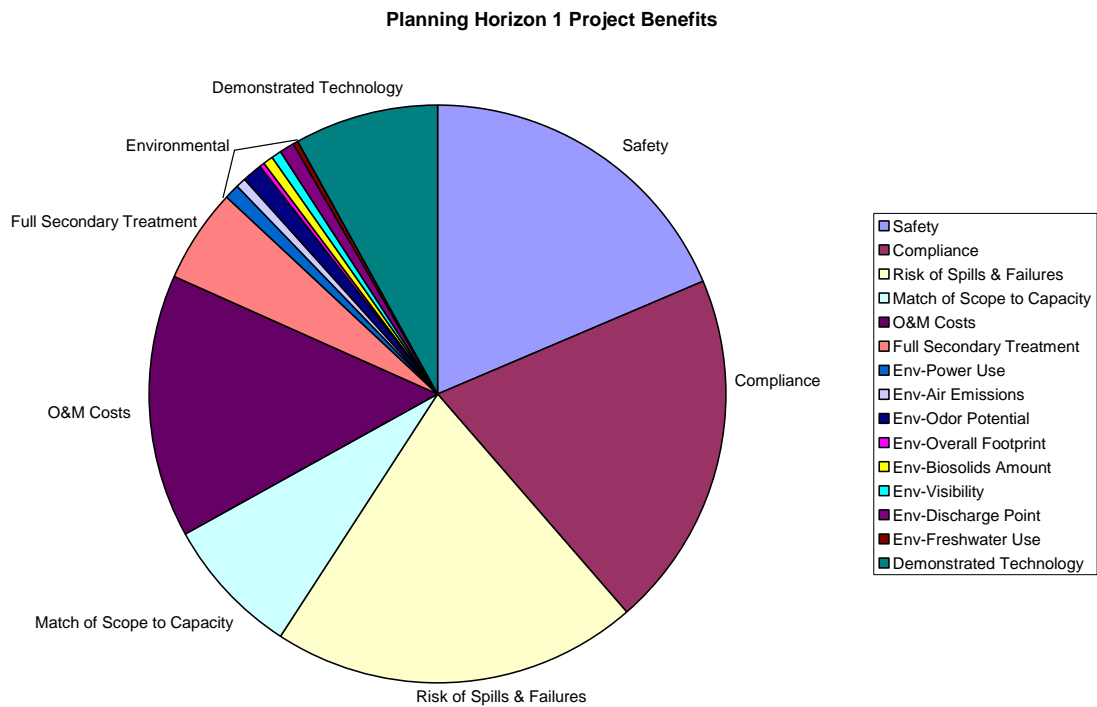
A model was run executing these criteria against each of the projects, and the results were reviewed with the workshop team. Adjustments were developed as shown in Figures 2-3, 2-4, 2-5, and 2-6.

The following conclusions can be reached from this information:

1. Planning Horizon 1 contains the greatest number of projects. This is as expected because OCSD has a priority on improving its system, and it includes most of the full secondary program.
2. The largest component of Planning Horizon 1 is Compliance followed closely by Safety and Risk of Spills and Failures. Compliance and Safety are fundamental to OCSD operations and must be met as the highest priority. Risk of Spills and Failures is closely associated and accordingly ranked high in the projects in the first group. Reducing O&M costs is the next highest ranking benefit, followed by Match of Scope to Capacity. Both these criteria support the OCSD principle of maximizing the investment for rate payers.
3. Planning Horizon 2 is similar to Planning Horizon 1 with the exception that Reducing O&M costs is nearly as high as Compliance and Risk of Spills and Failures. This result is reflective of the higher ranking criteria of Safety, Compliance, and Risk of Spills and Failures being addressed more in Planning Horizon 1 projects.
4. In Planning Horizon 3, Demonstrated Technology holds a much stronger position in the project rankings. This is reflective of the workshops thoughts that future projects not be implemented unless the technology is reliable. Safety drops to a lower position because these projects needed to be scheduled in earlier planning horizons.



**Figure 2-3. Comparison of Total Benefit of Planning Horizon Groups**



**Figure 2-4. Planning Horizon 1 Project Benefits**

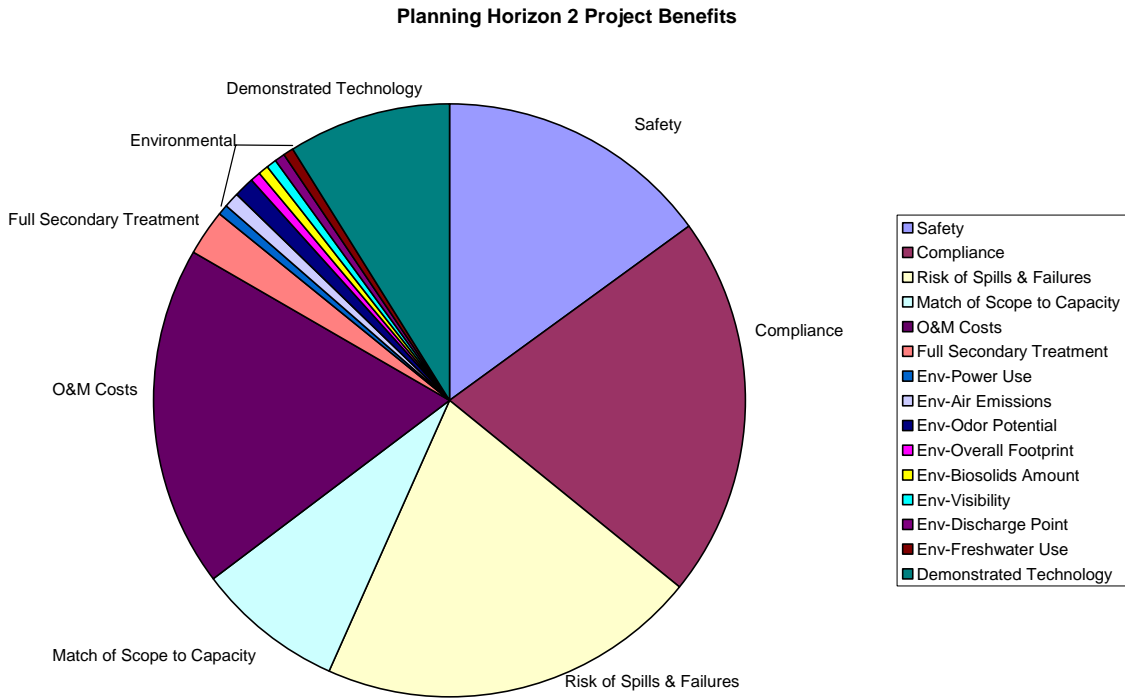


Figure 2-5. Planning Horizon 2 Project Benefits

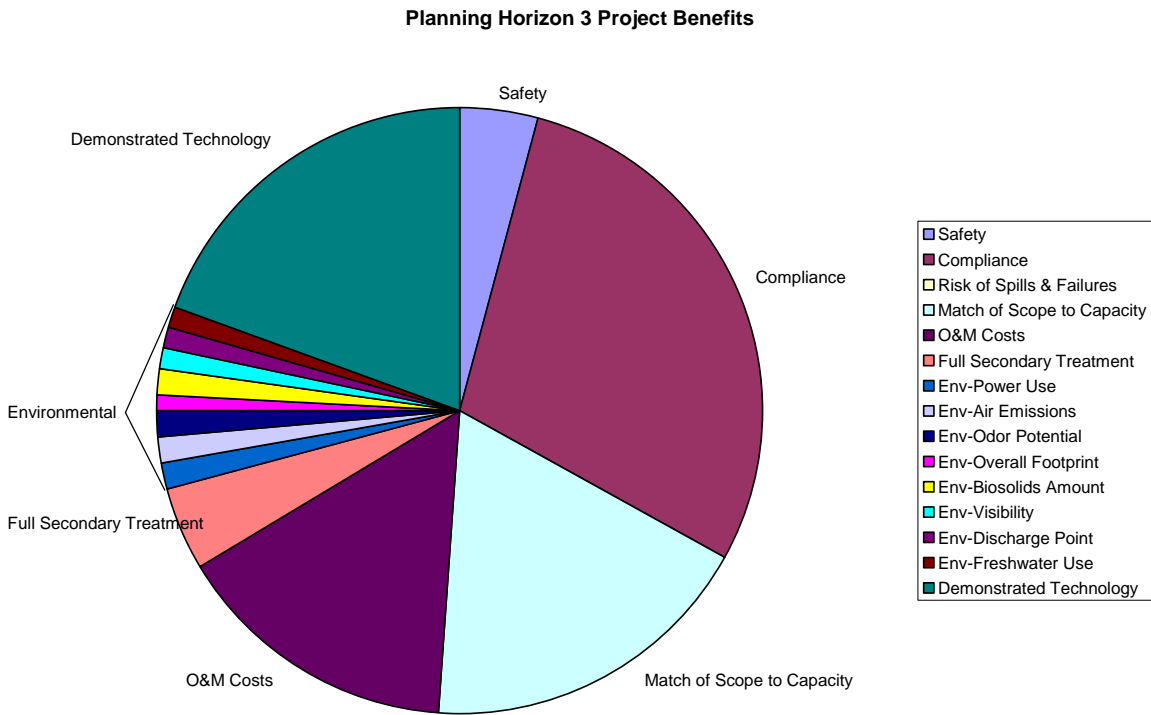


Figure 2-6. Planning Horizon 3 Project Benefits

## Project (c) East Garden Grove Wintersburg Channel Urban Runoff Diversion

Table 7(c) - Project Budget						
Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal						
Project Title: East Garden Grove Wintersburg Channel Urban Runoff Diversion						
		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$49,420	\$55,556	\$0	\$104,976	47%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$667,200	\$0	\$0	\$667,200	100%
(d)	Construction/Implementation	\$692,270	\$1,000,000	\$0	\$1,692,270	41%
(e)	Environmental Compliance/Mitigation/Enhancement	\$8,800	\$0	\$0	\$8,800	100%
(f)	Construction Administration	\$174,510	\$0	\$0	\$174,510	100%
(g)	Other Costs	\$0	\$0	\$0	\$0	0%
(h)	Construction/Implementation Contingency	\$166,595	\$0	\$0	\$166,595	100%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$1,758,795	\$1,055,556	\$0	\$2,814,351	62%
*List sources of funding: (a) City staff to provide services for these tasks and city to fund. (b) No land required on existing City or County lands. (c) Engineering and Environmental completed using different grant funded to the City. (d) City staff to provide construction contracting services and City to fund. (e) City staff to provide environmental compliance and monitoring services and City to fund.						

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

Detailed breakdown of the Administrative costs for the city of Huntington Beach staff are provided "Table A-Project Admin". These costs include the (1) direct administrative time for management of the contract, (2) labor compliance program and (3) developing the quarterly report associated with the grant and additional reporting. These costs will be performed by City staff which is reflected in the estimated man-hours and rates.

**B. Row (b) Land Purchase/Easement**

There is no acquisition of new land required for this project since it will be performed on lands that the City already owns and through easements on Orange County Flood Control.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

The detailed breakdown of the estimated engineering costs are shown on "Table C-Engineering/Environmental" which is attached. These costs have already been expended by the City in the preparation of the design, environmental documentation, and regulatory permitting. These costs were broken down into the major areas of (1) assessment and evaluation (or preliminary engineering analysis/studies and alternatives analysis), (2) final design which includes the plans and specifications, (3) environmental documentation which is a detailed CEQA Mitigated Negative Declaration that has

been approved, and (4) the environmental permitting which has also been completed. The costs in the table reflects the actual contract costs expended for these particular tasks.

**D. Row (d) Construction/Implementation**

A detailed breakdown of the costs in this budget category have been provided on "Table D-construction" which is attached. In addition, these costs reflect a detailed engineer's construction cost estimate that was performed based on quantity takeoffs and construction costs utilizing the proposed detailed construction drawings. The engineer's estimate is provided as a separated reference spreadsheet. The additional costs categories which have been included which were estimated based on the proposed duration of the construction schedule include (1) contracting/public bid/award, (2) mobilization, and (3) demobilization.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

There is no environmental mitigation required with this phase of the project since the diversion system is being constructed in an existing concrete flood control channel and the diversion pipeline is within street R/W. The additional environmental compliance will be related to biological monitoring for birds prior to construction and compliance with the storm water quality requirements during construction and the NPDES.

**F. Row (f) Construction Administration**

The detailed breakdown of the costs associated with this particular budget category are illustrated on "Table F-construction administration" which is attached. The costs were estimated based on the different tasks for this work item to administer the construction contract and using the estimated during from the construction schedule. The particular tasks included: monitoring, inspection, shop drawing review, RFI, weekly construction meetings, construction schedule monitoring and updates, and progress reporting / contractor correspondences.

**G. Row (g) Other Costs**

No additional costs beyond those estimated.

**H. Row (h) Construction/Implementation Contingency**

A contingency was estimated for the construction budget based on using 10% of the Engineer's construction estimate. This is a standard percentage utilized for this level of estimate.

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

## Project (c) East Garden Grove Wintersburg Channel Urban Runoff Diversion (C. Huntington Beach)

### Table A - Direct project Administration Costs

[illegible]



**Project (c) East Garden Grove Wintersburg Channel Urban Runoff Diversion (C. Huntington Beach)**

### Table C - Planning/Design/Engineering/Environmental Documentation

[illegible]

**Project (c) East Garden Grove Wintersburg Channel Urban Runoff Diversion (C. Huntington Beach)**

### Table D - Construction/Implementation

[illegible]

**Project (c) East Garden Grove Wintersburg Channel Urban Runoff Diversion (C. Huntington Beach)**

### Table E - Environmental Compliance / Mitigation/ Enhancement

[illegible]

**Project (c) East Garden Grove Wintersburg Channel Urban Runoff Diversion (C. Huntington Beach)**

Table F - Construction Administration

[illegible]

## Project (d) Romoland Line A Flood System

<b>Table 7(d) - Project Budget</b> Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b> Project Title: <b>Romoland Line A Flood System</b>						
Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$115,178	\$55,556	\$0	\$170,734	<b>67%</b>
<b>(b)</b>	Land Purchase/Easement	\$1,000,000	\$0	\$0	\$1,000,000	<b>100%</b>
<b>(c)</b>	Planning/Design/Engineering/ Environmental Documentation	\$921,427	\$0	\$0	\$921,427	<b>100%</b>
<b>(d)</b>	Construction/Implementation	\$3,702,482	\$1,000,000	\$0	\$4,702,482	<b>79%</b>
<b>(e)</b>	Environmental Compliance/ Mitigation/Enhancement	\$1,000,000	\$0	\$0	\$1,000,000	<b>100%</b>
<b>(f)</b>	Construction Administration	\$376,199	\$0	\$0	\$376,199	<b>100%</b>
<b>(g)</b>	Other Costs	\$50,000	\$0	\$0	\$50,000	<b>100%</b>
<b>(h)</b>	Construction/Implementation Contingency	\$235,124	\$0	\$0	\$235,124	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$7,400,410</b>	<b>\$1,055,556</b>	<b>\$0</b>	<b>\$8,455,966</b>	<b>88%</b>

\*List sources of funding: Homeland Romoland ADP landowners and the City of Menifee

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

City of Menifee project administration costs for the grant are estimated at 85,025 which is 1.05% of the construction costs.

**B. Row (b) Land Purchase/Easement**

Acquisition of right-of-way necessary to construct the Project was completed over several years ending in 2007. For the Project the land purchase cost was \$2,000,000 pursuant to an agreement between the Homeland Romoland ADP landowners and the City of Menifee. All the right-of-way has been dedicated for this project.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

To date, the Homeland/Romoland ADP landowners have spent \$540,199 on planning, design, engineering and environmental documentation for this Project. An additional \$90,000 is anticipated for final design modifications for the segmented project and updating of permits. The total cost is estimated to be \$630,199.

**D. Row (d) Construction/Implementation**

The Project is currently in the construction/implementation phase. The budget for completing the project has been updated from the original 2008 cost estimate to reflect current construction market conditions. A detailed breakdown of construction implementation costs is included with Table 7. The total construction cost is \$8,502,403 which will be offset by the current removal of material from the detention basins on a fee basis. The net construction cost is estimated to be \$3,702,483.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

This item is mainly complete. The environmental documents and permitting must be updated. The budget for this effort including current costs is estimated at \$1,000,000.

**F. Row (f) Construction Administration**

This item is ongoing. The budget for Construction Administration is set at 4.66% of total Construction/Implementation costs or \$376,199.

**G. Row (g) Other Costs**

Costs for legal services, licenses and permits are not expected to exceed \$50,000.

**H. Row (h) Construction/Implementation Contingency**

A contingency equal to 2.91% of the construction/implementation budget, totaling \$235,124 is included in the total project budget to offset potential cost increases due to unknown conditions encountered during construction.

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

## Project (e) Santa Ana Watershed Vireo Monitoring

Table 7(e) - Project Budget						
Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b>						
Project Title: <b>Santa Ana Watershed Vireo Monitoring</b>						
		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$20,918	\$33,333	\$0	\$54,251	39%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$0	\$0	\$0	\$0	0%
(d)	Construction/Implementation	\$247,495	\$600,000	\$0	\$847,495	29%
(e)	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	0%
(f)	Construction Administration	\$0	\$0	\$0	\$0	0%
(g)	Other Costs	\$0	\$0	\$0	\$0	0%
(h)	Construction/Implementation Contingency	\$0	\$0	\$0	\$0	0%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$268,413	\$633,333	\$0	\$901,746	30%
*List sources of funding: Sources of match funding include the Santa Ana Watershed Trust Fund, in-lieu fee mitigation funding and Army Corps mitigation funding. None of these are state-funded sources.						



**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	10	\$2,123
Sr. Project Manager	\$169	24	\$4,059
Sr. Administrative Assistant	\$108	10	\$1,085
Administrative Assistant I	\$75	105	\$7,838
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	10	\$2,508
Accounting Technician	\$103	35	\$3,593
Data & Information Systems Manager	\$222	10	\$2,216
GIS Analyst	\$139	24	\$3,331
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$31,584</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$33,334</b>

**Task1: SAWA Project Administration**

The SAWA Executive Director (ED), Lead Biologist (LB) and Executive Assistant (EA) will track hours worked in implementation of the projects in order to create invoices related to the project tasks.

Hourly Rates with benefits/overhead:		2011	2012	2013
ED		\$57.74	\$59.74	\$61.25
LB		\$52.29	\$53.86	\$55.48
EA		\$28.88	\$29.75	\$30.64
<b>2011</b>				
ED:	4 quarterly invoices, 4 hours each = 16 hours			\$923.84
LB:	4 quarterly invoices, 10 hours each = 40 hours			\$2,091.60
EA:	4 quarterly invoices, 2 hours each = 8 hours			\$231.04
	<b>Total for 2011:</b>			<b>\$3,246.48</b>
<b>2012</b>				
ED:	4 quarterly invoices, 4 hours each = 16 hours			\$951.52
LB:	4 quarterly invoices, 10 hours each = 40 hours			\$2,154.40
EA:	4 quarterly invoices, 2 hours each = 8 hours			\$238.00
	<b>Total for 2012:</b>			<b>\$3,343.92</b>

2013

ED: 4 quarterly invoices, 4 hours each = 16 hours	\$980.00
LB: 4 quarterly invoices, 10 hours each = 40 hours	\$2,219.20
EA: 4 quarterly invoices, 2 hours each = 8 hours	\$245.12
Total for 2013:	\$3,444.32

TOTAL FOR TASK 1: \$10,034.72

**TASK 2: REPORTING**

The SAWA Executive Director (ED) and Lead Biologist (LB) will collaborate to compile all of the administrative reports related to the grant contract.

Hourly Rates with benefits/overhead:	2011	2012	2013
ED	\$57.74	\$59.74	\$61.25
LB	\$52.29	\$53.86	\$55.48

2011

ED: 4 administrative reports, 8 hours each = 32 hours	\$1,847.68
LB: 4 administrative reports, 8 hours each = 32 hours	\$1,673.28
Total for 2011:	\$3,520.96

2012

ED: 4 administrative reports, 8 hours each = 32 hours	\$1,903.04
LB: 4 administrative reports, 8 hours each = 32 hours	\$1,723.52
Total for 2012:	\$3,626.56

2013

ED: 4 administrative reports, 8 hours each = 32 hours	\$1,960.00
LB: 4 administrative reports, 8 hours each = 32 hours	\$1,775.36
Total for 2013:	\$3,735.36

TOTAL FOR TASK 2: \$10,882.88

**B. Row (b) Land Purchase/Easement**

There are no tasks or deliverables in this budget category because there are no land purchases or easements required.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

There are no tasks or deliverables in this budget category because this is an ongoing program and there are no construction or environmental impacts. Also, all project planning has been completed.

**D. Row (d) Construction/Implementation**

Task 3 Implementation  
Subtask 3.1 Vireo Monitoring

## Attachment 4 Budget

The positions associated with this task are Lead Biologist (LB), Biologist 2 (Bio2), 5 Field Biologists (FB), Natural Resources Specialist 1 (NRS1) and Natural Resources Specialist 2 (NRS2).

Hourly Rates with benefits/overhead:	2011	2012	2013
LB	\$52.29	\$53.86	\$55.48
Bio2	\$41.19	\$42.43	\$43.70
FB (5)	\$30.89	\$31.82	\$32.77
NRS1	\$42.29	\$43.56	\$44.87
NRS2	\$45.21	\$45.57	\$47.96
2011			
LB: 729.5 hours monitoring and data management			\$38,145.55
Bio2: 569.5 hours monitoring and data management			\$23,457.71
FB (5): 569.5 hours monitoring and data management		\$87,959.28	(\$17,591.86 each)
NRS1: 569.5 hours monitoring and data management			\$24,084.16
NRS2: 569.5 hours monitoring and data management			\$25,747.10
Total for		2011:	\$203,178.36
2012			
LB: 729.5 hours monitoring and data management			\$39,290.87
Bio2: 569.5 hours monitoring and data management			\$24,163.89
FB (5): 569.5 hours monitoring and data management		\$90,607.45	(\$18,121.49 each)
NRS1: 569.5 hours monitoring and data management			\$24,807.42
NRS2: 569.5 hours monitoring and data management			\$25,952.12
Total for		2012:	\$204,821.75
2013			
LB: 729.5 hours monitoring and data management			\$40,472.66
Bio2: 569.5 hours monitoring and data management			\$24,887.15
FB (5): 569.5 hours monitoring and data management		\$93,312.58	(\$18,662.52 each)
NRS1: 569.5 hours monitoring and data management			\$25,553.47
NRS2: 569.5 hours monitoring and data management			\$27,313.22
Total for		2013:	\$211,539.08
TOTAL FOR SUBTASK 3.1: \$619,539.75			

### SUBTASK 3.2 COWBIRD MANAGEMENT

The positions associated with this task are Lead Biologist (LB), Biologist 2 (Bio2), 5 Field Biologists (FB), Natural Resources Specialist 1 (NRS1), Natural Resources Specialist 2 (NRS2) and 8 Seasonal Cowbird Assistants (SCBA).

Hourly Rates with benefits/overhead:	2011	2012	2013
LB	\$52.29	\$53.86	\$55.48
Bio2	\$41.19	\$42.43	\$43.70
FB (5)	\$30.89	\$31.82	\$32.77
NRS1	\$42.29	\$43.56	\$44.87
NRS2	\$45.21	\$45.57	\$47.96
SCBA	\$14.00	\$14.42	\$14.85
2011			
LB: 15 hours monitoring and data management			\$784.35
Bio2: 15 hours monitoring and data management			\$617.85
FB (4): 15 hours monitoring and data management		\$1853.40	(\$463.35 each)
FB: 35 hours monitoring and data management			\$1,081.00
NRS1: 15 hours monitoring and data management			\$634.35

## Attachment 4 Budget

NRS2: 15 hours monitoring and data management			\$678.15
SCBA (8) 608 hours assess. and trap maintenance		\$68,110 (8,513.75 each)	
Total	for	2011:	\$73,759.10

2012

LB: 15 hours monitoring and data management			\$807.90
Bio2: 15 hours monitoring and data management			\$636.45
FB (4): 15 hours monitoring and data management		\$1,909.20 (\$477.30 each)	
FB: 35 hours monitoring and data management			\$1,113.70
NRS1: 15 hours monitoring and data management			\$653.40
NRS2: 15 hours monitoring and data management			\$683.55
SCBA (8) 608 hours assess. and trap maintenance		\$70,153.30 (8,941.25 each)	
Total	for	2012:	\$75,957.50

2013

LB: 15 hours monitoring and data management			\$832.20
Bio2: 15 hours monitoring and data management			\$655.50
FB (4): 15 hours monitoring and data management		\$1,966.20 (\$491.55 each)	
FB: 35 hours monitoring and data management			\$1,146.95
NRS1: 15 hours monitoring and data management			\$673.05
NRS2: 15 hours monitoring and data management			\$719.40
SCBA (8) 608 hours assess. and trap maintenance		\$72,245.25 (9,030.66 each)	
Total	for	2013:	\$78,238.55

TOTAL FOR SUBTASK 3.2: \$227,955.15

TOTAL FOR TASK 3, IMPLEMENTATION: 847,494.90

### E. Row (e) Environmental Compliance / Mitigation/ Enhancement

There are no tasks or deliverables in this budget category because there are no environmental impacts associated with this work.

### F. Row (f) Construction Administration

There are no tasks or deliverables in this budget category because there is no construction associated with this work.

### G. Row (g) Other Costs

There are no tasks or deliverables in this budget category because there are no other costs anticipated.

### H. Row (h) Construction/Implementation Contingency

There are no tasks or deliverables in this budget category because there are no contingency costs anticipated.

### I. Row (i) Grand Total (Sum rows (a) through (h) for each column)

## Project (f) Mill Creek Wetlands

<p align="center"><b>Table 7(f) - Project Budget</b></p> <p>Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b></p> <p align="center">Project Title: <b>Mill Creek Wetlands</b></p>						
		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used *	Total	% Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$200,000	\$55,556		\$255,556	<b>78%</b>
<b>(b)</b>	Land Purchase/Easement	\$525,000			\$525,000	<b>100%</b>
<b>(c)</b>	Planning/Design/Engineering/Environmental Documentation	\$300,000		\$2,060,000	\$2,360,000	<b>13%</b>
<b>(d)</b>	Construction/Implementation	\$9,620,000	\$1,000,000	\$2,940,000	\$13,560,000	<b>71%</b>
<b>(e)</b>	Environmental Compliance/Mitigation/Enhancement	\$120,000			\$120,000	<b>100%</b>
<b>(f)</b>	Construction Administration	\$678,000			\$678,000	<b>100%</b>
<b>(g)</b>	Other Costs	\$200,000			\$200,000	<b>100%</b>
<b>(h)</b>	Construction/Implementation Contingency (Construction Only)	\$2,712,000			\$2,712,000	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$14,355,000</b>	<b>\$1,055,556</b>	<b>\$5,000,000</b>	<b>\$20,410,556</b>	<b>70%</b>

\*List sources of funding: Proposition 40 State Water Resources Grant

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

Administrative tasks such as drafting and maintaining contracts, Board items, the project budget. This task also includes coordinating between various other agencies which have an interest in the project, such as the City of Rialto. See "Table A Detailed Budget" for more information.

The City of Ontario direct administration costs include a combination of project administration, communications / public relations, labor compliance, and grant administration. Due to the complexity of project development with multiple agencies, a quarter time equivalent staff level involvement is anticipated. Communications, labor compliance, and grant administration are anticipated to be addressed with consultants under city management. Based on city construction experience, a tenth time equivalent staff level is anticipated for each element of work.

Project administration is anticipated for a 24 month period while communications / labor compliance / and grant administration are anticipated to match the 12 month construction schedule. A blended rate of \$120 per hour is anticipated to address the variety of staff positions utilized to support the project. The combined direct project administration costs are outlined in detail under the Project Budget Detail with a total anticipated budget of \$200,000.

**B. Row (b) Land Purchase/Easement**

The project includes securing easements from the US Army Corps and private parties. The US Army Corps property easement is for approximately 35 acres. The Out grant Agreement is anticipated to be through in kind creation of habitat based on a valuation of the property current appraisal value. The private party easements for approximately 7 acres combined are anticipated to be purchased based on the same appraisal value.

Property appraisal value is based on estimated recent land sales for property within the Prado Basin currently under drainage easements for the 100 year flood plain. Local appraisals are anticipated to be around \$75,000 per acre. Additional detail is outlined in the Project Budget Detail. With credit for habitat creation, the overall easement costs are anticipated to be \$525,000.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

The project planning and design effort is at a 50% level of completion on the construction documents with CEQA completed (not adopted) and NEPA / Permitting currently under way.

The completion of the environmental and permitting efforts are anticipated to be approximately \$2,060,000 with work completed and to be completed. Final construction documents are anticipated to be \$300,000 to complete.

The total effort to complete planning and construction documents is \$2,360,000. A detail breakdown of contracts under way for elements of work completed and under way currently are outlined in the Project Budget Detail.

**D. Row (d) Construction/Implementation**

The Engineer Cost Estimate for Construction of the Project is estimated at \$13,560,000. A detail breakdown of construction elements is included in the Project Budget Detail.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

The project environmental compliance program includes both water quality and habitat management aspects to meet the 401 permit requirements. The development of the Water Quality Monitoring Plan and the Habitat Management Plan will be prepared with consultants and will include baseline field monitoring.

The total effort to complete the environmental compliance is \$120,000. A detail breakdown of the contracts for the elements of work is outlined in the Project Budget Detail.

**F. Row (f) Construction Administration**

The City of Ontario will administer or contract out the construction administration. Based on the city's experience, 5% of the construction hard costs is an appropriate budget. The construction administration is budgeted at \$678,000.

**G. Row (g) Other Costs**

The project will require permit and inspection fees from multiple agencies due to the complexity of the work under multiple jurisdictions. These fees are estimated to be \$200,000.

**H. Row (h) Construction/Implementation Contingency**

The project construction contingency is estimated to be 20% of the construction hard costs based on the level of completion of the design and planning. The construction contingency is estimated at \$2,712,000.

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

# Project (f) Mill Creek Wetlands (C. Ontario)



## Cucamonga Creek Watershed Regional Water Quality Project

### Project Budget

\* (Operation Costs Not Included)

Project Alternative

### Cucamonga Creek Watershed Regional Water Quality Project (Scraper Haul)

Assumes Earthwork Haul is within 1 Mile in Chino Preserve Area

Description	Quantity	Unit	Unit Cost	Total Cost	Notes
<b>Category A - Direct Project Administration Costs</b>					
Project Administration	0.25	PY	\$ 120.00	\$ 124,800.00	24 Month Project Schedule / Blended Rate
Communications / Public Relations	0.1	PY	\$ 120.00	\$ 24,960.00	12 Month Construction Schedule / Blended Rate
Labor Compliance	0.1	PY	\$ 120.00	\$ 24,960.00	12 Month Construction Schedule / Blended Rate
Grant Administration	0.1	PY	\$ 120.00	\$ 24,960.00	12 Month Construction Schedule / Blended Rate
<b>Sub Total</b>				<b>\$ 200,000.00</b>	<b>Use \$200,000</b>
<b>Category B - Land Purchase / Easement</b>					
Army Corps Easement Appraisal Value	35	AC	\$ 75,000.00	\$ 2,625,000.00	Easement to Ontario
Wind Property Appraisal Value	6	AC	\$ 75,000.00	\$ 450,000.00	Easement to Ontario
Stueve Bro. Property Appraisal Value	1	AC	\$ 75,000.00	\$ 75,000.00	Easement to Ontario
Army Corps Habitat Credit Value	1	LS	\$ (2,625,000.00)	\$ (2,625,000.00)	Sensitive Habitat Creation * (See Below) Exceeds Easement Appraisal Value (Appraisal Value Used)
<b>Sub Total</b>				<b>\$ 525,000.00</b>	
<b>Category C - Planning / Design / Engineering / Environmental Documentation</b>					
<b>Planning &amp; Environmental Clearances</b>				<b>\$ 2,060,000.00</b>	
AECOM (DMJM Harris)	\$ 110.00	Blended Rate		\$ 347,500.00	Civil Engineering
Geosyntec Consulting	\$ 140.00	Blended Rate		\$ 503,800.00	Water Quality / System Design
Stantec Consulting	\$ 140.00	Blended Rate		\$ 159,400.00	Aerial Topography / Mapping
Sukut Construction	\$ 120.00	Blended Rate		\$ 3,000.00	Constructability Review
Utility Specialists	\$ 140.00	Blended Rate		\$ 14,800.00	Dry Utility Relocation
Vandermost Consulting	\$ 140.00	Blended Rate		\$ 892,000.00	Environmental Documents
Withers & Sandgren	\$ 110.00	Blended Rate		\$ 130,500.00	Landscape / Recreation Concepts
Chicago Title				\$ 9,000.00	Landowner Title Search
<b>Construction Documents</b>				<b>\$ 300,000.00</b>	
AECOM	\$ 110.00	Blended Rate		\$ 150,000.00	Civil Engineering Design
Geosyntec Consulting	\$ 140.00	Blended Rate		\$ 25,000.00	Civil Engineering Final Design Support
Utility Specialists	\$ 140.00	Blended Rate		\$ 25,000.00	Dry Utility Design
Withers & Sandgren	\$ 110.00	Blended Rate		\$ 100,000.00	Landscape / Trail System Design
<b>Sub Total</b>				<b>\$ 2,360,000.00</b>	
<b>Category D - Construction Implementation</b>					
Diversion Structure	1	LS	\$ 250,000.00	\$ 250,000.00	Connection to Cucamonga
Low Flow Conveyance - 24 inch	2,000	LF	\$ 120.00	\$ 240,000.00	
Wet Flow Conveyance - 8x9.5 RCB	2,000	LF	\$ 650.00	\$ 1,300,000.00	
Basin Flow Connections	1	LS	\$ 250,000.00	\$ 250,000.00	Pipe, Risers, Spillways
System Controls	1	LS	\$ 300,000.00	\$ 300,000.00	Gates / Valves
Forebay Armor Lining	120,000	SF	\$ 8.00	\$ 960,000.00	Approx. 4 acres (2/3 hard lined)
Grading (Forebay & Basins)	800,000	CY	\$ 2.00	\$ 1,600,000.00	
Wetland Landscaping *	9	AC	\$ 130,000.00	\$ 1,170,000.00	
Slope Landscaping*	23	AC	\$ 185,000.00	\$ 4,255,000.00	
Trail System	8	AC	\$ 240,000.00	\$ 1,920,000.00	
Irrigation	8	AC	\$ 100,000.00	\$ 800,000.00	Above Ground System
Parking Lots (Equestrian & Hiking)	25,000	SF	\$ 6.00	\$ 150,000.00	8 Hiking / 8 Equestrian
SCE Pole Relocation	13	EA	\$ 20,000.00	\$ 260,000.00	66 KV Line
Discharge Structure	1,500	CY	\$ 70.00	\$ 105,000.00	Rip Rap Discharge
<b>Sub Total</b>				<b>\$ 13,560,000.00</b>	
<b>Category E - Environmental Compliance / Mitigation / Enhancement</b>					
<b>Water Quality</b>					
Monitoring Plan				\$ 50,000.00	401 Requirement (Geosyntec Consulting)
Initial Field Monitoring & Reporting				\$ 15,000.00	2 Dry Weather / 3 Wet Weather Samples
<b>Habitat Management</b>					
Management Plan				\$ 50,000.00	401 Requirement (Vandermost Consulting)
Initial Field Monitoring & Reporting				\$ 5,000.00	Single event
<b>Sub Total</b>				<b>\$ 120,000.00</b>	
<b>Category F - Construction Administration</b>					
Construction Management				\$ 678,000.00	5% Construction Costs
<b>Sub Total</b>				<b>\$ 678,000.00</b>	
<b>Category G - Other Costs</b>					
Permit & Inspection Fees				\$ 200,000.00	USACE / City of Chino / City of Ontario
<b>Sub Total</b>				<b>\$ 200,000.00</b>	
<b>Category H - Construction Implementation Contingency</b>					
Construction / Implementation Contingency Only	20%		\$	2,712,000.00	Construction Documents 50% Level of Completion
<b>Sub Total</b>				<b>\$ 2,712,000.00</b>	
<b>Grand Total</b>				<b>\$20,355,000.00</b>	



## Project (g) Cactus Basins

<p align="center"><b>Table 7(g) - Project Budget</b></p> <p>Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b></p> <p align="center">Project Title: <b>Cactus Basin</b></p>						
		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$5,950	\$55,556		\$61,506	<b>10%</b>
<b>(b)</b>	Land Purchase/Easement	\$0			\$0	<b>0%</b>
<b>(c)</b>	Planning/Design/Engineering/Environmental Documentation	\$164,000			\$164,000	<b>100%</b>
<b>(d)</b>	Construction/Implementation	\$6,078,730	\$1,000,000		\$7,078,730	<b>86%</b>
<b>(e)</b>	Environmental Compliance/Mitigation/Enhancement	\$45,600			\$45,600	<b>100%</b>
<b>(f)</b>	Construction Administration	\$1,176,240			\$1,176,240	<b>100%</b>
<b>(g)</b>	Other Costs	\$14,250			\$14,250	<b>100%</b>
<b>(h)</b>	Construction/Implementation Contingency	\$712,432			\$712,432	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$8,197,202</b>	<b>\$1,055,556</b>	<b>\$0</b>	<b>\$9,252,758</b>	<b>89%</b>

\*List sources of funding: Property Tax.

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

San Bernardino County Flood Control District project administrative tasks include drafting and maintaining contracts, Board items, and preparing project budgets. This task also includes coordinating between various other agencies which have an interest in the project, such as the City of Rialto. See "Table A Detailed Budget" for more information.

**B. Row (b) Land Purchase/Easement**

Not applicable.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

This task includes the full development of the project plans, specifications, and construction cost estimate, as well as procurement of all required permits. Ancillary tasks included verification of District right of way (no procurement or easements required), environmental studies to support the requirements of the various permits, and field investigations of the site. The District does not maintain records of costs incurred per the design stages discussed above. The tasks under budget category C are approximately 98% complete and the District is not seeking reimbursement for such tasks. See "Table A Detailed Budget" for more information.

**D. Row (d) Construction/Implementation**

Construction cost estimate for project. See "Construction Cost Estimate" for more information.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

Revegetation of 0.8 acres at the project site. Landscape work will occur concurrently with the construction of the project as it will part of the same contract. See "Table B Construction Cost Estimate" for more details.

**F. Row (f) Construction Administration**

This task includes the cost to administer the construction of the project. Since it is only an estimate at this time, the District has practice of budgeting 15% of the construction contract cost for the administration of the project. See "Table B Construction Cost Estimate" for more details.

**G. Row (g) Other Costs**

This task includes incidental costs associated with the project, such as Counsel review of various documents, and reproduction services. See "Table A Detailed Budget" for more details.

**H. Row (h) Construction/Implementation Contingency**

This task sets aside funds in the case there is a project cost over-run. Since it is only an estimate at this time, the District has practice of budgeting 10% of the construction contract cost for contingencies. See "Table B Construction Cost Estimate" for more details

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

Project (g) Cactus Basin (SBCFCD)

Table A Detailed Budget

A) Direct Project Administration Costs

2/26/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
2/19/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
2/17/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
2/24/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
3/2/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
3/4/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	3	9	0	27.00
3/12/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
3/8/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
3/9/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	5	9	0	45.00
3/10/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	6	9	0	54.00
3/17/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
3/18/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
3/22/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
3/24/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
4/8/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
4/14/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
4/15/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
4/20/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
4/27/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
5/11/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
5/26/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/1/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/2/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	2	9	0	18.00
6/4/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/3/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/8/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/14/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/15/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/16/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/28/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
6/29/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	1	9	0	9.00
7/1/2010	B1478	BLAKESLEE, KEVIN B	939	3695	Flood-Kevin Blakeslee, 4 x 4 Hybrid	7132	2	9	0	18.00
8/7/2008	W0209	WALKER, MELISSA	965	1040	Administration - Labor	2	86.28	0	82.16	172.55
7/17/2009	E5240	GONZALEZ,OMAR	966	1145	Agency Coord. & Public Contact - La	1	68.78	0	65.55	68.78
7/13/2009	E5240	GONZALEZ,OMAR	966	1145	Agency Coord. & Public Contact - La	3	68.78	0	65.55	206.35
7/14/2009	E5240	GONZALEZ,OMAR	966	1145	Agency Coord. & Public Contact - La	1	68.78	0	65.55	68.78
7/16/2009	E5240	GONZALEZ,OMAR	966	1145	Agency Coord. & Public Contact - La	1	68.78	0	65.55	68.78
8/21/2008	N0731	NEILL, RHONDA	967	1160	Agreements/Board Items - Labor	0.5	65.86	0	62.72	32.93
12/8/2008	B3719	BARNES, MELINDA	977	1160	Agreements/Board Items - Labor	2	33.52	0	31.95	67.05
12/9/2008	B3719	BARNES, MELINDA	977	1160	Agreements/Board Items - Labor	1	33.52	0	31.95	33.52
12/16/2008	B3719	BARNES, MELINDA	977	1160	Agreements/Board Items - Labor	1	33.52	0	31.95	33.52
12/22/2008	B3719	BARNES, MELINDA	977	1160	Agreements/Board Items - Labor	2	33.52	0	31.95	67.05
12/23/2008	B3719	BARNES, MELINDA	977	1160	Agreements/Board Items - Labor	1	33.52	0	31.95	33.52
12/30/2008	B3719	BARNES, MELINDA	977	1160	Agreements/Board Items - Labor	2	33.52	0	31.95	67.05
7/9/2007	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	2	55.84	0	54.57	111.69
7/10/2007	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	1	55.84	0	54.57	55.84
7/16/2007	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	1	55.84	0	54.57	55.84
7/17/2007	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	1	55.84	0	54.57	55.84
7/18/2007	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	1	55.84	0	54.57	55.84
10/1/2007	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	2	56.16	0	54.09	112.32
11/29/2007	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	1	62	0	59.71	62.00
11/30/2007	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	4	62	0	59.71	248.02
12/3/2007	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	1	62	0	59.71	62.00
12/28/2007	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	1	62	0	59.71	62.00
1/7/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	2	56.16	0	54.09	112.32
1/8/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	7	56.16	0	54.09	393.13
1/9/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	7	56.16	0	54.09	393.13
1/10/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	2	56.16	0	54.09	112.32
1/18/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	4	56.16	0	54.09	224.65
4/29/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	1	56.16	0	54.09	56.16
7/14/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	1	56.16	0	54.09	56.16
8/21/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	1	56.8	0	54.09	56.80
8/26/2008	A0705	ARMSTEAD, DOLORES	967	1625	Budget Support/Studies - Labor	0.5	56.8	0	54.09	28.40
5/20/2009	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	3	67.15	0	63.99	201.45
5/19/2009	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	1	67.15	0	63.99	67.15
5/28/2009	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	3	67.15	0	63.99	201.45
6/1/2009	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	0.5	67.15	0	63.99	33.58
5/27/2009	N0731	NEILL, RHONDA	967	1625	Budget Support/Studies - Labor	1	67.15	0	63.99	67.15
6/2/2010	E4677	Mendoza, Richard	927	3140	FILES/RECORDS/SCANNING - Labor	3	36.56	0	34.73	109.67
6/4/2010	E4677	Mendoza, Richard	927	3140	FILES/RECORDS/SCANNING - Labor	2	36.56	0	34.73	73.11
6/8/2010	E4677	Mendoza, Richard	927	3140	FILES/RECORDS/SCANNING - Labor	2	36.56	0	34.73	73.11

6/9/2010	E4677	Mendoza, Richard	927	3140	FILES/RECORDS/SCANNING - Labor	1	36.56	0	34.73	36.56
6/10/2010	E4677	Mendoza, Richard	927	3140	FILES/RECORDS/SCANNING - Labor	3	36.56	0	34.73	109.67
6/15/2010	E4677	Mendoza, Richard	927	3140	FILES/RECORDS/SCANNING - Labor	2	36.56	0	34.73	73.11
6/29/2010	E4677	Mendoza, Richard	927	3140	FILES/RECORDS/SCANNING - Labor	3	37.49	0	35.62	112.48
11/29/2007	N0731	NEILL, RHONDA	967	3815	MEETINGS - Labor	1	62	0	59.71	62.00
11/30/2007	N0731	NEILL, RHONDA	967	3815	MEETINGS - Labor	1	62	0	59.71	62.00
5/19/2009	N0731	NEILL, RHONDA	967	3815	MEETINGS - Labor	1.5	67.15	0	63.99	100.73
8/12/2009	E5240	GONZALEZ,OMAR	966	4175	Outside Agency Coordination - Labor	2	68.98	0	65.55	137.97
8/13/2009	E5240	GONZALEZ,OMAR	966	4175	Outside Agency Coordination - Labor	3	68.98	0	65.55	206.95
8/10/2009	E5240	GONZALEZ,OMAR	966	4175	Outside Agency Coordination - Labor	2	68.98	0	65.55	137.97
8/19/2009	E5240	GONZALEZ,OMAR	966	4175	Outside Agency Coordination - Labor	3	68.98	0	65.55	206.95
8/20/2009	E5240	GONZALEZ,OMAR	966	4175	Outside Agency Coordination - Labor	1	68.98	0	65.55	68.98
8/25/2009	E5240	GONZALEZ,OMAR	966	4175	Outside Agency Coordination - Labor	1	68.98	0	65.55	68.98
8/27/2009	E5240	GONZALEZ,OMAR	966	4175	Outside Agency Coordination - Labor	1	68.98	0	65.55	68.98
										5,919.34

**C) Planning/Design/Engineering/Enviromental Documentation**

3/26/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	9	35.36	0	34.05	318.23
3/26/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	4	66.67	0	64.21	266.68
3/27/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	6.5	35.36	0	34.05	229.83
3/28/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	3.5	35.36	0	34.05	123.75
3/28/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	4	66.67	0	64.21	266.68
3/31/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	7	35.36	0	34.05	247.51
4/1/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	6.5	35.36	0	34.05	229.83
4/1/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	66.67	0	64.21	66.67
4/3/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	4	35.36	0	34.05	141.43
4/4/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	4	35.36	0	34.05	141.43
4/7/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	7.5	35.36	0	34.05	265.19
4/8/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	7.5	35.36	0	34.05	265.19
4/9/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	4.5	35.36	0	34.05	159.11
4/9/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	2	66.67	0	64.21	133.34
4/10/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	7.5	35.36	0	34.05	265.19
4/10/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	66.67	0	64.21	66.67
4/11/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	2	66.67	0	64.21	133.34
4/14/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	1.5	35.36	0	34.05	53.04
4/15/2008	A4728	GUZMAN, STACY	934	5390	RIGHT OF WAY ENGINEERING - Labor	0.5	35.36	0	34.05	17.68
4/23/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	2	66.67	0	64.21	133.34
4/24/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	66.67	0	64.21	66.67
4/25/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	2	66.67	0	64.21	133.34
5/8/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	66.67	0	64.21	66.67
5/9/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	2	66.67	0	64.21	133.34
5/22/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	66.67	0	64.21	66.67
9/23/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	73.14	0	69.65	73.14
9/24/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	73.14	0	69.65	73.14
10/7/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	69.85	0	66.57	69.85
10/8/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	69.85	0	66.57	69.85
9/29/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	2	69.85	0	66.57	139.71
10/6/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	69.85	0	66.57	69.85
10/20/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	1	69.85	0	66.57	69.85
10/23/2008	W1576	WILLIAMS, THOMAS	934	5390	RIGHT OF WAY ENGINEERING - Labor	3	69.85	0	66.57	209.56
10/1/2009	M1447	MC CONNELL, RICHARD	962	6530	Flood- Admin Denise, 4 Door 4x4 SUV	6351	1	8	0	8.00
2/25/2010	E2735	ABDELMESSIH,NAGIEB	934	3695	Flood- Admin Denise, 4 Door 4x4 SUV	6351	8	8	0	64.00
2/23/2010	A4728	GUZMAN, STACY	934	3695	Flood-962; 4x4 1/2 ton 4 door	6017	0.5	7	0	3.50
6/16/2010	E5409	FAM,MICHAEL	932	3815	Flood-962; 4x4 1/2 ton 4 door	6017	3	7	0	21.00
1/22/2009	E4516	WOOD,BRANDY	979	3125	Flood-979 EMD	6055	4	7	0	28.00
1/27/2009	E4516	WOOD,BRANDY	979	3125	Flood-979 EMD	6055	2	7	0	14.00
6/25/2008	B9924	NICDAO, DELLAN	931	1670	Calculations - Labor	1	46.24	0	44.53	46.24
6/25/2009	A9476	MIKHAIL, MERVAT	932	1670	Calculations - Labor	1	77.89	0	74.23	77.89
8/19/2009	A9476	MIKHAIL, MERVAT	932	1670	Calculations - Labor	0.5	78.12	0	74.23	39.06
10/6/2009	A9476	MIKHAIL, MERVAT	932	1670	Calculations - Labor	3	78.12	0	74.23	234.37
12/17/2008	H1468	HERNANDEZ, NORA C	977	1910	Clerical - Labor	2	30.41	0	28.98	60.83
12/18/2008	H1468	HERNANDEZ, NORA C	977	1910	Clerical - Labor	2.5	30.41	0	28.98	76.03
1/6/2009	H1468	HERNANDEZ, NORA C	977	1910	Clerical - Labor	0.5	30.41	0	28.98	15.21
1/7/2009	H1468	HERNANDEZ, NORA C	977	1910	Clerical - Labor	0.5	30.41	0	28.98	15.21
9/25/2008	D7993	SHAM, MAN KEI	999	2360	COST ESTIMATES & SPECIFICATIONS - L	2	16.35	0	24.3	32.70
3/19/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	2	89.62	0	86.31	179.24
4/3/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	1	89.62	0	86.31	89.62
4/23/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	1	89.62	0	86.31	89.62
4/30/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	1	89.62	0	86.31	89.62
5/15/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	1	89.62	0	86.31	89.62
5/19/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	2	89.62	0	86.31	179.24
5/27/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	1	89.62	0	86.31	89.62
10/23/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	5	89.37	0	85.16	446.85
11/4/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	1	89.37	0	85.16	89.37
11/12/2008	B1734	<invalid Employee No>	961	2615	DIV COORD & PROJECT SCOPING - Labor	1	89.37	0	85.16	89.37
5/12/2008	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	4	46.24	0	44.53	184.94
5/13/2008	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	4	46.24	0	44.53	184.94

5/14/2008	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	6	46.24	0	44.53	277.41
5/15/2008	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	7	46.24	0	44.53	323.65
5/16/2008	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	4	46.24	0	44.53	184.94
6/30/2008	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	1	46.24	0	44.53	46.24
7/1/2008	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	3	46.24	0	44.53	138.71
5/11/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	0.5	51.29	0	48.88	25.64
5/28/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	0.5	51.29	0	48.88	25.64
5/26/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	0.5	51.29	0	48.88	25.64
6/10/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	0.5	51.29	0	48.88	25.64
6/11/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	0.5	51.29	0	48.88	25.64
6/16/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	0.5	51.29	0	48.88	25.64
8/5/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	1	51.44	0	48.88	51.44
8/6/2009	B9924	NICDAO, DELLAN	931	2660	Drafting - Labor	1	51.44	0	48.88	51.44
4/10/2008	A9476	MIKHAIL, MERVAT	932	2840	Engineer Investigation - Labor	4	66.67	0	64.21	266.68
5/21/2009	A9476	MIKHAIL, MERVAT	932	2840	Engineer Investigation - Labor	4	77.89	0	74.23	311.58
5/20/2008	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	2	70.05	0	67.46	140.10
9/25/2008	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1	73.14	0	69.65	73.14
9/24/2008	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1	73.14	0	69.65	73.14
6/5/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	2	77.89	0	74.23	155.79
6/4/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1	77.89	0	74.23	77.89
6/5/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	4	68.78	0	65.55	275.13
5/29/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	5	68.78	0	65.55	343.91
6/12/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	2	77.89	0	74.23	155.79
6/11/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	2	77.89	0	74.23	155.79
6/17/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1.5	77.89	0	74.23	116.84
6/12/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	3	68.78	0	65.55	206.35
6/19/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	1	68.78	0	65.55	68.78
6/17/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	1	68.78	0	65.55	68.78
6/11/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	1	68.78	0	65.55	68.78
6/25/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1	77.89	0	74.23	77.89
6/29/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1	77.89	0	74.23	77.89
6/25/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	1	68.78	0	65.55	68.78
6/26/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	3	68.78	0	65.55	206.35
7/1/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	1	68.78	0	65.55	68.78
6/24/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	1	68.78	0	65.55	68.78
7/2/2009	E5240	GONZALEZ,OMAR	966	2870	Engineering - Labor	1	68.78	0	65.55	68.78
8/19/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1	78.12	0	74.23	78.12
8/25/2009	A9476	MIKHAIL, MERVAT	932	2870	Engineering - Labor	1	78.12	0	74.23	78.12
3/27/2008	D0584	DIETZMAN JANET L	978	2885	Engineering Services - Labor	6	54.82	0	52.8	328.94
4/16/2008	A9476	MIKHAIL, MERVAT	932	2900	ENVIRONMENTAL COORDINATION - Labor	1	66.67	0	64.21	66.67
4/17/2008	A9476	MIKHAIL, MERVAT	932	2900	ENVIRONMENTAL COORDINATION - Labor	1	66.67	0	64.21	66.67
4/30/2008	A9476	MIKHAIL, MERVAT	932	2900	ENVIRONMENTAL COORDINATION - Labor	2	70.05	0	67.46	140.10
10/7/2009	A9476	MIKHAIL, MERVAT	932	2900	ENVIRONMENTAL COORDINATION - Labor	1	78.12	0	74.23	78.12
10/5/2009	A9476	MIKHAIL, MERVAT	932	2900	ENVIRONMENTAL COORDINATION - Labor	0	78.12	0.5	74.23	37.11
6/29/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.15	0	71.48	146.30
7/3/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	73.15	0	71.48	73.15
7/6/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.15	0	71.48	146.30
7/16/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	8	73.15	0	71.48	585.20
7/17/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4.5	73.15	0	71.48	329.18
7/20/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.15	0	71.48	146.30
8/9/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
8/10/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
8/14/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
8/15/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	5	73.57	0	70.85	367.84
8/16/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
8/17/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
9/11/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.57	0	70.85	220.70
11/20/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	73.57	0	70.85	73.57
12/4/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.57	0	70.85	220.70
12/5/2007	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	6	73.57	0	70.85	441.41
1/11/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
1/14/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.57	0	70.85	220.70
1/18/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
3/6/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
3/10/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
3/12/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
3/14/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4	73.57	0	70.85	294.27
3/17/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.57	0	70.85	220.70
3/18/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4	73.57	0	70.85	294.27
3/19/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4.5	73.57	0	70.85	331.06
3/20/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	7	73.57	0	70.85	514.98
3/24/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
3/25/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	6	73.57	0	70.85	441.41
3/26/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	6	73.57	0	70.85	441.41
3/27/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	7	73.57	0	70.85	514.98
3/28/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
3/31/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
4/1/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3.5	73.57	0	70.85	257.49

4/7/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
4/8/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
4/9/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	8.5	73.57	0	70.85	625.33
4/10/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	7	73.57	0	70.85	514.98
4/16/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	73.57	0	70.85	73.57
4/17/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
4/18/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
4/29/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
4/30/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	8	73.57	0	70.85	588.54
5/1/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	7	73.57	0	70.85	514.98
5/2/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4	73.57	0	70.85	294.27
5/5/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.57	0	70.85	662.11
5/6/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	7	73.57	0	70.85	514.98
5/9/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4	73.57	0	70.85	294.27
5/13/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.57	0	70.85	220.70
5/19/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.57	0	70.85	220.70
6/2/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.57	0	70.85	220.70
6/19/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.57	0	70.85	147.14
8/15/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4	74.4	0	70.85	297.62
8/22/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	74.4	0	70.85	74.40
8/21/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	74.4	0	70.85	148.81
8/25/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	74.4	0	70.85	74.40
8/26/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	74.4	0	70.85	148.81
8/29/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	74.4	0	70.85	74.40
12/2/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.37	0	69.92	220.12
12/1/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	73.37	0	69.92	660.35
12/11/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	73.37	0	69.92	146.74
12/23/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	73.37	0	69.92	220.12
12/30/2008	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	73.37	0	69.92	73.37
1/2/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	73.37	0	69.92	73.37
1/15/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	5	73.37	0	69.92	366.86
1/14/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	73.37	0	69.92	73.37
2/9/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	74.1	0	70.62	222.31
2/10/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	74.1	0	70.62	222.31
2/11/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	74.1	0	70.62	74.10
2/12/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3.25	74.1	0	70.62	240.83
8/5/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	3	74.32	0	70.62	222.96
10/26/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	74.32	0	70.62	74.32
10/28/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	1	74.32	0	70.62	74.32
11/9/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	9	74.32	0	70.62	668.89
11/10/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	74.32	0	70.62	148.64
11/20/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	4	74.32	0	70.62	297.28
11/13/2009	M2708	<invalid Employee No>	979	2915	Environmental Review - Labor	2	74.32	0	70.62	148.64
5/24/2010	A2442	DERRY, MICHELE KIM	979	2915	Environmental Review - Labor	1	67.35	0	63.99	67.35
5/25/2010	A2442	DERRY, MICHELE KIM	979	2915	Environmental Review - Labor	1	67.35	0	63.99	67.35
5/27/2010	A2442	DERRY, MICHELE KIM	979	2915	Environmental Review - Labor	2	67.35	0	63.99	134.70
6/8/2010	A2442	DERRY, MICHELE KIM	979	2915	Environmental Review - Labor	2	67.35	0	63.99	134.70
6/14/2010	A2442	DERRY, MICHELE KIM	979	2915	Environmental Review - Labor	2	67.35	0	63.99	134.70
6/23/2010	A2442	DERRY, MICHELE KIM	979	2915	Environmental Review - Labor	1	67.35	0	63.99	67.35
6/29/2010	A2442	DERRY, MICHELE KIM	979	2915	Environmental Review - Labor	1	67.35	0	63.99	67.35
8/21/2007	V0190	VARMA, NARESH	977	2930	Environmental Studies - Labor	2	89.62	0	86.31	179.24
6/26/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	2	73.57	0	70.85	147.14
6/24/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	1	73.57	0	70.85	73.57
6/27/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	2	73.57	0	70.85	147.14
6/30/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	2.5	73.57	0	70.85	183.92
7/1/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	1	73.57	0	70.85	73.57
7/11/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	2	73.57	0	70.85	147.14
7/18/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	4	73.57	0	70.85	294.27
7/10/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	2	73.57	0	70.85	147.14
7/23/2008	V0190	VARMA, NARESH	977	2930	Environmental Studies - Labor	1	90.64	0	86.31	90.64
7/24/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	9	74.4	0	70.85	669.64
7/25/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	4	74.4	0	70.85	297.62
7/28/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	9	74.4	0	70.85	669.64
7/29/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	9	74.4	0	70.85	669.64
7/30/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	9	74.4	0	70.85	669.64
7/31/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	4.5	74.4	0	70.85	334.82
8/1/2008	M2708	<invalid Employee No>	979	2930	Environmental Studies - Labor	4	74.4	0	70.85	297.62
2/24/2009	E4516	WOOD,BRANDY	979	2930	Environmental Studies - Labor	8.75	42.19	0	40.21	369.20
6/15/2009	E4516	WOOD,BRANDY	979	2930	Environmental Studies - Labor	2	44.34	0	42.25	88.67
6/7/2010	E4516	WOOD,BRANDY	979	2930	Environmental Studies - Labor	4	44.47	0	42.25	177.87
6/14/2010	A2111	ROMICH, KIMBERLY S	979	2930	Environmental Studies - Labor	1.5	51.44	0	48.88	77.16
6/17/2010	A2111	ROMICH, KIMBERLY S	979	2930	Environmental Studies - Labor	1	51.44	0	48.88	51.44
5/21/2009	A9476	MIKHAIL, MERVAT	932	2975	Estimates - Labor	5	77.89	0	74.23	389.47
5/22/2009	A9476	MIKHAIL, MERVAT	932	2975	Estimates - Labor	4	77.89	0	74.23	311.58
5/20/2009	A9476	MIKHAIL, MERVAT	932	2975	Estimates - Labor	3	77.89	0	74.23	233.68
7/21/2008	D9791	RIVERA, MILO	979	3125	FIELD INVESTIGATIONS - Labor	4	51.5	0	49.04	205.98
1/22/2009	E4516	WOOD,BRANDY	979	3125	FIELD INVESTIGATIONS - Labor	4	42.19	0	40.21	168.78
1/27/2009	E4516	WOOD,BRANDY	979	3125	FIELD INVESTIGATIONS - Labor	2	42.19	0	40.21	84.39

6/5/2009	A9476	MIKHAIL, MERVAT	932	3125	FIELD INVESTIGATIONS - Labor	2	77.89	0	74.23	155.79
6/11/2010	A2111	ROMICH, KIMBERLY S	979	3125	FIELD INVESTIGATIONS - Labor	6	51.44	0	48.88	308.64
7/2/2007	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	2	89.11	0	87.07	178.22
6/25/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	50.63	0	49.47	354.39
6/26/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	50.63	0	49.47	354.39
6/27/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	8	50.63	0	49.47	405.02
6/28/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	8	50.63	0	49.47	405.02
6/29/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	50.63	0	49.47	202.51
7/2/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	76.9	0	75.14	76.90
7/2/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	8	50.63	0	49.47	405.02
7/3/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	76.9	0	75.14	76.90
7/3/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.63	0	49.47	455.65
7/5/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	2	76.9	0	75.14	153.79
7/5/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.63	0	49.47	455.65
7/6/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	50.63	0	49.47	202.51
7/10/2007	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.11	0	87.07	89.11
7/9/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	76.9	0	75.14	76.90
7/9/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.63	0	49.47	455.65
7/10/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.63	0	49.47	455.65
7/11/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	50.63	0	49.47	354.39
7/12/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	50.63	0	49.47	354.39
7/13/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	50.63	0	49.47	202.51
7/16/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	2	50.63	0	49.47	101.26
7/17/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	8	50.63	0	49.47	405.02
7/18/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	8	50.63	0	49.47	405.02
7/19/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	8	50.63	0	49.47	405.02
7/20/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	50.63	0	49.47	202.51
7/23/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.92	0	49.04	458.25
7/24/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.92	0	49.04	458.25
7/25/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	5	50.92	0	49.04	254.58
8/2/2007	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.62	0	86.31	89.62
8/13/2007	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.62	0	86.31	89.62
8/6/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.92	0	49.04	458.25
8/7/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	50.92	0	49.04	458.25
8/8/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
8/8/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	5	50.92	0	49.04	254.58
8/9/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	6	50.92	0	49.04	305.50
8/13/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
8/13/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	8	50.92	0	49.04	407.33
8/14/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	50.92	0	49.04	203.67
8/15/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
8/27/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/4/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/12/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/17/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	2	77.33	0	74.48	154.67
9/18/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/19/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/20/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	2	77.33	0	74.48	154.67
9/25/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/26/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/27/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
9/28/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
10/1/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
10/2/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
10/3/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
10/4/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	2	77.33	0	74.48	154.67
10/9/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
10/10/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
10/11/2007	B4373	<invalid Employee No>	932	3155	FINAL DESIGN - Labor	1	77.33	0	74.48	77.33
10/22/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	2	44.02	0	42.39	88.04
10/23/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
10/24/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
10/25/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
10/29/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	5	44.02	0	42.39	220.09
10/30/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
10/31/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
11/1/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
11/2/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	2	44.02	0	42.39	88.04
11/5/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
11/6/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	5	44.02	0	42.39	220.09
11/7/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
11/8/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
11/9/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	44.02	0	42.39	176.07
11/13/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	3	44.02	0	42.39	132.05
11/14/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	6	44.02	0	42.39	264.11
11/15/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
11/16/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	44.02	0	42.39	176.07
11/19/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12



11/20/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
11/21/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
11/23/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	44.02	0	42.39	176.07
11/26/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
11/27/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	44.02	0	42.39	176.07
11/28/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	5	44.02	0	42.39	220.09
11/29/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	44.02	0	42.39	176.07
12/3/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
12/4/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
12/5/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
12/6/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	5.5	44.02	0	42.39	242.10
12/11/2007	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.62	0	86.31	89.62
12/12/2007	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.62	0	86.31	89.62
12/13/2007	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.62	0	86.31	89.62
12/10/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	9	44.02	0	42.39	396.16
12/11/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
12/12/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	7	44.02	0	42.39	308.12
12/13/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	44.02	0	42.39	176.07
12/14/2007	B9924	NICDAO, DELLAN	932	3155	FINAL DESIGN - Labor	4	44.02	0	42.39	176.07
6/25/2008	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.62	0	86.31	89.62
7/15/2008	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	89.62	0	86.31	89.62
7/31/2008	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	90.64	0	86.31	90.64
8/5/2008	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	90.64	0	86.31	90.64
8/7/2008	B1734	<invalid Employee No>	961	3155	FINAL DESIGN - Labor	1	90.64	0	86.31	90.64
12/18/2009	F0859	FLASHER, ANDREA	972	3200	Flood Hazard Reviews - Labor	4	51.44	0	48.88	205.76
12/10/2009	F0859	FLASHER, ANDREA	972	3200	Flood Hazard Reviews - Labor	3	51.44	0	48.88	154.32
12/11/2009	F0859	FLASHER, ANDREA	972	3200	Flood Hazard Reviews - Labor	4	51.44	0	48.88	205.76
12/14/2009	F0859	FLASHER, ANDREA	972	3200	Flood Hazard Reviews - Labor	6	51.44	0	48.88	308.64
7/2/2007	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	0.5	89.11	0	87.07	44.56
7/3/2007	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	0.5	89.11	0	87.07	44.56
7/10/2007	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	1	89.11	0	87.07	89.11
7/26/2007	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	2	89.62	0	86.31	179.24
7/31/2007	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	2	89.62	0	86.31	179.24
10/23/2007	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	1	89.62	0	86.31	89.62
10/23/2007	M2708	<invalid Employee No>	979	3815	MEETINGS - Labor	1	73.57	0	70.85	73.57
1/15/2008	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	1	89.62	0	86.31	89.62
3/19/2008	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	1	89.62	0	86.31	89.62
3/19/2008	M2708	<invalid Employee No>	979	3815	MEETINGS - Labor	1	73.57	0	70.85	73.57
3/20/2008	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	1	66.67	0	64.21	66.67
7/14/2008	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	2	70.05	0	67.46	140.10
7/9/2008	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	1	70.05	0	67.46	70.05
5/4/2009	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	1	77.89	0	74.23	77.89
5/27/2009	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	2	77.89	0	74.23	155.79
6/4/2009	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	1	77.89	0	74.23	77.89
6/18/2009	M2708	<invalid Employee No>	979	3815	MEETINGS - Labor	1.5	74.1	0	70.62	111.15
7/7/2009	V0190	VARMA, NARESH	977	3815	MEETINGS - Labor	1	94.89	0	90.43	94.89
8/5/2009	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	1	78.12	0	74.23	78.12
8/10/2009	A9476	MIKHAIL, MERVAT	932	3815	MEETINGS - Labor	1	78.12	0	74.23	78.12
6/16/2010	E5409	FAM, MICHAEL	932	3815	MEETINGS - Labor	3	41.35	0	39.28	124.04
6/14/2010	A2442	DERRY, MICHELE KIM	979	3815	MEETINGS - Labor	1	67.35	0	63.99	67.35
6/16/2010	A2442	DERRY, MICHELE KIM	979	3815	MEETINGS - Labor	1	67.35	0	63.99	67.35
5/7/2008	A9476	MIKHAIL, MERVAT	932	4640	Project Scheduling - Labor	2	70.05	0	67.46	140.10
9/5/2008	B9924	NICDAO, DELLAN	931	5285	Reports - Labor	2	48.27	0	45.97	96.55
5/27/2009	A9476	MIKHAIL, MERVAT	932	5285	Reports - Labor	5	77.89	0	74.23	389.47
5/28/2009	A9476	MIKHAIL, MERVAT	932	5285	Reports - Labor	2	77.89	0	74.23	155.79
5/26/2009	A9476	MIKHAIL, MERVAT	932	5285	Reports - Labor	1	77.89	0	74.23	77.89
5/21/2008	A9476	MIKHAIL, MERVAT	932	5960	Specification - Labor	6	70.05	0	67.46	420.29
5/22/2008	A9476	MIKHAIL, MERVAT	932	5960	Specification - Labor	6	70.05	0	67.46	420.29
5/8/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	0.5	77.89	0	74.23	38.95
5/11/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
5/12/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
5/18/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	2	77.89	0	74.23	155.79
5/19/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	2	77.89	0	74.23	155.79
5/20/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
6/1/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
6/2/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
6/4/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
6/23/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
6/24/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
6/29/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	1	77.89	0	74.23	77.89
10/6/2009	A9476	MIKHAIL, MERVAT	932	6125	Supervision - Labor	0.5	78.12	0	74.23	39.06
8/17/2009	B9924	NICDAO, DELLAN	931	6500	Tech. Div Coord & Project Scoping -	0.5	51.44	0	48.88	25.72
5/8/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
5/22/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
5/11/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
5/12/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
5/13/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	8	51.29	0	48.88	410.31
5/14/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	5	51.29	0	48.88	256.45

5/15/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
5/26/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
5/27/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
5/29/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
6/5/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
6/2/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/3/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	7	51.29	0	48.88	359.02
6/4/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/9/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/10/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/12/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
6/8/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/11/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/22/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/23/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/24/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	9	51.29	0	48.88	461.60
6/25/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
6/26/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
7/14/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.29	0	48.88	205.16
7/28/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	1	51.44	0	48.88	51.44
8/11/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	1	51.44	0	48.88	51.44
8/14/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	4	51.44	0	48.88	205.76
8/10/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	2	51.44	0	48.88	102.88
8/17/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	2	51.44	0	48.88	102.88
8/18/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	2	51.44	0	48.88	102.88
10/1/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	3	51.44	0	48.88	154.32
10/6/2009	M1447	MC CONNELL, RICHARD	962	6530	Tech. Final Design - Labor	8	51.44	0	48.88	411.52
FC080439	CALIFOR56	CALIFORNIA DEPT FISH & GAME	3/5/2008		STREAMBED ALTERATION AGREEMENT	984	2930	1	4000	4,000.00
FC080440	CALIFOR98	CA REGION WATER QUALTY CNTRL	3/5/2008		CACTUS BASIN NO 3	984	2930	1	40000	40,000.00
08-0615	LILBURN51	LILBURN CORPORATION	7/12/2008	Z2602	ON CALL ENVIR PERMIT-PLANNING SVC	984	2930	1	1870	1,870.00
10-0601	LILBURN51	LILBURN CORPORATION	6/4/2010	Z2602	ON-CALL ENVIR PERMIT & PLANNING SVC	977	2930	1	11580	11,580.00
07-1113	LILBURN51	LILBURN CORPORATION	11/1/2007	J1428	SQAQMD PLANS FOR CACTUS BASIN	984	1040	1	1018	1,018.00
70720	LILBURN51	LILBURN CORPORATION	7/12/2007	A0681Y08		984	4175	1	1340.89	1,340.89
07-0720	LILBURN51	LILBURN CORPORATION	7/12/2007	A0681Y06		984	4175	1	1984.61	1,984.61
07-0815	LILBURN51	LILBURN CORPORATION	8/9/2007	A0681Y08		984	4175	1	3317.42	3,317.42
07-0915	LILBURN51	LILBURN CORPORATION	8/9/2007	A0681Y08		984	4175	1	3324.5	3,324.50
08-0644	LILBURN51	LILBURN CORPORATION	7/21/2008	A0681Y08		984	4175	1	517.07	517.07
11069	NATURAL78	NATURAL RESOURCES ASSESSMENT	5/26/2009	K2469	CONDUCT TRAPPING STUDIES	977	3125	1	6500	6,500.00
610F		LAND USE SVC, CEQA FOR CACTUS BASIN	979	2930						2,300.00
709F		ENVIRONMENTAL IMPACT REVIEW FOR CAC	984	2930						2,656.75
										163,634.19

#### G) Other Costs

621F		COUNTY CNSL FEE - OCTOBER 2007	984	2390						72.50
641F		COUNTY COUNSEL FEE - OCTOBER 2008	984	2390						425.00
585F		COUNTY COUNSEL FEE-JULY 2008	984	2390						42.50
525F		COUNTY COUNSEL FEE-JUNE 2008	984	2390						217.50
782F		COUNTY COUNSEL FEES - APRIL 2008	984	2390						761.25
665F		COUNTY COUNSEL FEES - DECEMBER 2007	984	2390						1,305.00
747F		COUNTY COUNSEL FEES - FEBRUARY 2008	984	2390						1,595.00
738F		COUNTY COUNSEL FEES - JANUARY 2008	984	2390						1,921.25
760F		COUNTY COUNSEL FEES - MARCH 2008	984	2390						398.75
647F		COUNTY COUNSEL FEES - NOVEMBER 2007	984	2390						1,196.25
617F		COUNTY COUNSEL FEE-SEPTEMBER 2008	984	2390						170.00
741F		COUNTY COUNSEL FEES-FEBRUARY 2009	984	2390						42.50
719F		COUNTY COUNSEL FEES-JANUARY 2009	984	2390						42.50
663F		COUNTY COUNSEL FEES-NOVEMBER 2008	984	2390						42.50
655F		DOCUMENT FEES FOR CACTUS BASIN # 3	979	2910						2,656.75
756T		FLOOD CONTRO REPRO SEPTEMBER 2008	984	4460						53.50
1301T		FLOOD CONTROL REPRO APRIL 2008	984	4460						2.10
724T		FLOOD CONTROL REPRO AUGUST 2008	984	4460						27.80
912T		FLOOD CONTROL REPRO DECEMBER 2007	984	4460						331.45
1037T		FLOOD CONTROL REPRO DECEMBER 2009	984	4460						11.90
1194T		FLOOD CONTROL REPRO FEBRUARY 2010	984	4460						10.20
616T		FLOOD CONTROL REPRO JULY 2009	984	4460						243.60
542T		FLOOD CONTROL REPRO JUNE 2009	984	4460						2.50
1486T		FLOOD CONTROL REPRO MAY 2009	984	4460						3.50
855T		FLOOD CONTROL REPRO OCTOBER 2008	984	4460						5.00
1062T		FLOOD REPRO DECEMBER 2008	984	4460						93.00
756F		OBJECT CODE CORR-02/09 CNTY CNSL FE	984	2390						42.50
TR 234-08		REAL ESTATE SVC CHGS - APR 2008	976	4910						195.00
TR 021-09		REAL ESTATE SVC CHGS - JUNE 2008 AC	976	4910						455.00
TR 343-09		REAL ESTATE SVC CHGS - PP 17 JULY 0	976	4910						260.00
C10010		REFUND OF OVERPMT SVR CHGS 1/31/09-	247	6155						(33.93)
685T		REPRO FLOOD CONTROL AUGUST 2009	984	4460						135.10
604T		REPRO FLOOD CONTROL JULY 2008	984	4460						5.00
W09048		SURVEYOR LBR CHGS 02/28/09 THRU 03/	247	6155						107.00

W09036	SURVEYOR LBR CHGS 12/06/08 THRU 12/	247	6155	642.00
W09037	SURVEYOR LBR CHGS 12/13/08 THRU 12/	247	6155	722.25
W10004	SVR LABOR CHGS 04/25/09 THRU 05/01/	984	6155	26.75
				14,230.47

**Project (g) Cactus Basin (SBCFCD)**

Engineer's Estimate

**Project:****Cactus Basin No. 3****W.O.#: F01666****Limits:****West of Cactus Avenue and North of Baseline Road**

Last Modified: Sep 25 08 10:50

Item No.	Approx. Quant.	Meas. Unit	Item Description	Unit Price	Total
1	1	L.S.	Mobilization	\$ 300,000.00	\$ 300,000.00
2	1	L.S.	Storm Water Pollution Prevention Plan (SWPPP)	\$ 10,000.00	\$ 10,000.00
3	1	L.S.	Traffic Control	\$ 25,000.00	\$ 25,000.00
4	1	L.S.	Field Office Facility	\$ 30,000.00	\$ 30,000.00
5	1	L.S.	Clearing and Grubbing (41 AC.)	\$ 32,800.00	\$ 32,800.00
6	1	L.S.	Develop Water Supply	\$ 10,000.00	\$ 10,000.00
7	1	L.S.	Diversion and Control of Water	\$ 20,000.00	\$ 20,000.00
8	1	L.S.	Excavation Safety Plan	\$ 8,000.00	\$ 8,000.00
9	63,530	S.Y.	Dam Embankment Foundation Preparation	\$ 1.00	\$ 63,530.00
10	502,678	C.Y.	Dam and Basin Excavation	\$ 3.00	\$ 1,508,034.00
11	318,220	C.Y.	Zone 1 Material (Dam Embankment)	\$ 5.00	\$ 1,591,100.00
12	2,500	C.Y.	Zone 1 Material ( Structural Backfill)	\$ 20.00	\$ 50,000.00
13	5,036	C.Y.	Zone 2 Material Class 2 Aggregate Base, 12" Deep	\$ 35.00	\$ 176,260.00
14	1,843	TON	Zone 3 Material (3" A.C. Type B)	\$ 80.00	\$ 147,440.00
15	2,066	C.Y.	Zone 4 Material (RSP) 1/4 Ton, Method "B" Placement	\$ 60.00	\$ 123,960.00
16	52	C.Y.	Zone 5 Material Concreted Rock Splash Pad, Facing Class, Method "A" Placement	\$ 60.00	\$ 3,120.00
17	95	C.Y.	Zone 6 Material 1/4 Ton Grouted Rip-Rap, Method "A" Placement	\$ 100.00	\$ 9,500.00
18	724	C.Y.	Zone 7 Material 1/2 Ton UngROUTED Rip-Rap, Method "A" Placement	\$ 80.00	\$ 57,920.00
19	96	C.Y.	Zone 8 Material Concreted Facing Rock, Method "A" Placement	\$ 80.00	\$ 7,680.00
20	92	C.Y.	Zone 9 Material Gravel Pad on Basin Floor Adjacent to Ramps	\$ 5.00	\$ 460.00
21	740	C.Y.	Zone 10 Material 1/2 Ton Grouted Rip-Rap, Method "A" Placement	\$ 60.00	\$ 44,400.00
22	375	C.Y.	Removal of Rock Slope Protection	\$ 20.00	\$ 7,500.00
23	375	C.Y.	Placing 2' Thick (RSP), Class light, Method "A" Placement	\$ 7.00	\$ 2,625.00
24	950	C.Y.	Spillway Slab, 96" RCP Floor Slab, Footings & Cut-off Walls (Class D)	\$ 600.00	\$ 570,000.00
25	1,763	C.Y.	Spillway Walls, RCP Walls, Pipe Cradles & Encasements (Class A)	\$ 800.00	\$ 1,410,400.00
26	1	L.S.	Spillway Under-drain System	\$ 100,000.00	\$ 100,000.00
27	4	EA.	Wing Type Headwall	\$ 7,000.00	\$ 28,000.00
28	1	EA.	"L" Headwall	\$ 5,000.00	\$ 5,000.00
29	6	EA.	Concrete Pipe Collars (Class A)	\$ 750.00	\$ 4,500.00
30	195	L.F.	24" RCP 1350-D	\$ 150.00	\$ 29,250.00
31	185	L.F.	30" RCP 1500-D	\$ 200.00	\$ 37,000.00

Project:

**Cactus Basin No. 3**W.O.#: **F01666**

Limits:

**West of Cactus Avenue and North of Baseline  
Road**

Last Modified: Sep 25 08 10:50

Item No.	Approx. Quant.	Meas. Unit	Item Description	Unit Price	Total
32	82	L.F.	36" RCP 1350-D	\$ 300.00	\$ 24,600.00
33	146	L.F.	54" RCP 1500-D	\$ 400.00	\$ 58,400.00
34	197	L.F.	96" RCP 2400-D	\$ 700.00	\$ 137,900.00
35	318	L.F.	120" RCP 2200-D	\$ 800.00	\$ 254,400.00
36	87	C.Y.	Miscellaneous Concrete (Minor) for V-Ditch & Concrete Swale	\$ 375.00	\$ 32,625.00
37	2	EA.	Drainage inlet structure with Frame & Grate (Type G-2) per CALTRANS SP D73	\$ 2,800.00	\$ 5,600.00
38	6	EA.	Sloped Protection Barrier per APWA SP 360-0	\$ 5,000.00	\$ 30,000.00
39	2	EA.	120" Waterman Flap Gate	\$ 25,000.00	\$ 50,000.00
40	2	EA.	Concrete Bulkhead per Riverside Co. SP{ (M816)-Modified	\$ 2,000.00	\$ 4,000.00
41	60,750	S.Y.	Revegetation	\$ 0.75	\$ 45,562.50
42	870	L.F.	6' Chain Link Boundary Fencing	\$ 20.00	\$ 17,400.00
43	570	L.F.	6' Chain Link Channel Fencing	\$ 20.00	\$ 11,400.00
44	1	EA.	20' Double Drive Gate	\$ 2,000.00	\$ 2,000.00
45	2	EA.	4' Walk Through Gates	\$ 500.00	\$ 1,000.00
46	2	EA.	Spillway Access Ladder	\$ 2,500.00	\$ 5,000.00
47	6,915	S.F.	Waterproofing for 96" RCP Drain Encasement	\$ 0.75	\$ 5,186.25
48	1,462	L.F.	Waterstops, Spillway Construction	\$ 12.50	\$ 18,275.00
49	3	EA.	Survey Monument	\$ 1,500.00	\$ 4,500.00
50	2	EA.	Project Identification Sign	\$ 1,500.00	\$ 3,000.00

**CONTRACT TOTAL: \$ 7,124,327.75****10% Contingencies: \$ 712,432.00****~15% Constr. Eng.: \$ 1,176,240.25****PROJECT TOTAL: \$ 9,013,000.00**

## Project (h) Inland Empire Brine Line Rehabilitation and Enhancement

<p align="center"><b>Table 7(h) - Project Budget</b></p> <p>Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b></p> <p>Project Title: <b>Inland Empire Brine Line Rehabilitation and Enhancement</b></p>						
Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$416,130	\$55,556	\$0	\$471,686	<b>88%</b>
<b>(b)</b>	Land Purchase/Easement	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(c)</b>	Planning/Design/Engineering/Environmental Documentation	\$361,376	\$0	\$0	\$361,376	<b>100%</b>
<b>(d)</b>	Construction/Implementation	\$2,538,439	\$1,000,000	\$6,000,000	\$9,538,439	<b>27%</b>
<b>(e)</b>	Environmental Compliance/Mitigation/Enhancement	\$114,994	\$0	\$0	\$114,994	<b>100%</b>
<b>(f)</b>	Construction Administration	\$316,947	\$0	\$0	\$316,947	<b>100%</b>
<b>(g)</b>	Other Costs	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(h)</b>	Construction/Implementation Contingency	\$468,945	\$0	\$0	\$468,945	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$4,216,831</b>	<b>\$1,055,556</b>	<b>\$6,000,000</b>	<b>\$11,272,387</b>	<b>37%</b>

\*List sources of funding: The project is funded by SAWPA's Pipeline Replacement Reserve Funds and a State Revolving Fund (SRF) Loan.

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct Project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

SAWPA will pay for the costs of managing this specific project from its own funds and will not seek reimbursement from IRWM Implementation Grant. Total cost for labor is \$416,130.

**B. Row (b) Land Purchase/Easement**

Not Applicable

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

Design is 100% Complete. Design commenced in June 2009 and was completed in November 2010. The 100% Design cost is \$226,092. CEQA is 100% Complete. CEQA commenced in August 2008 and was completed in May 2009. The CEQA cost is (from Oct 08 - May 09) \$135,284. SAWPA will fund 100% of these costs.

**D. Row (d) Construction/Implementation**

The design is 100% complete and the opinion of probable construction cost is \$9,378,908 as of November 17, 2010. The breakdown of construction/implementation cost of \$9,378,908 includes: Site Clearing (\$59,400); Special Provisions (\$462,580); Dewatering (\$606,000); Annular Space Grouting (\$642,500); Access Pit Excavation (\$765,800); Host Pipe Cleaning (\$216,000); RPM Pipe

(\$4,629,390); Fiberglass Manholes (\$272,000); Cast-in-Place Concrete (\$333,300); Sales Tax, Contractor's Profit and Overhead (\$1,391,938). Construction costs for Site Clearing conducted during the period of Oct - Dec 2010 is \$159,530. Total Construction Cost is \$9,538,438.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

The total estimated cost for restoration and monitoring and reporting for the first year is \$26,135 per acre. 4.4 acres of mitigation is required for a total of \$114,994. The total estimated cost for restoration and monitoring and reporting for the first year is based on the total cost \$270,500 for 10.35 acres or \$26,135/acre (\$245,000 for SAWA, \$3,500 for compost provided by IEUA, and \$22,000 for compost hauling).

**F. Row (f) Construction Administration**

The construction administration cost of \$262,827 is based on SAWPA's prior experiences with other construction projects. SAWPA will fund 100% of the costs and will not seek reimbursement from IRWM Implementation Grant. The Engineer's cost to review submittals, RFI's and Change Orders is \$54,120.

**G. Row (g) Other Costs**

**H. Row (h) Construction/Implementation Contingency**

A five percent of construction/implementation cost is included herein as contingencies to handle unknown conditions encountered during construction. This percentage is based on SAWPA's extensive construction experiences with prior projects and the level of design complete (100%). SAWPA will fund 100% of this contingency cost.

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**



## Project (i) Arlington Desalter Interconnection Project

<p align="center"><b>Table 7(i) - Project Budget</b></p> <p>Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b></p> <p>Proposal Title: <b>Arlington Desalter Interconnection Project</b></p>						
Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$5,760	\$22,222	\$0	\$27,982	<b>21%</b>
<b>(b)</b>	Land Purchase/Easement	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(c)</b>	Planning/Design/Engineering/Environmental Documentation	\$78,442		\$0	\$78,442	<b>100%</b>
<b>(d)</b>	Construction/Implementation	\$254,800	\$400,000	\$0	\$654,800	<b>39%</b>
<b>(e)</b>	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(f)</b>	Construction Administration	\$14,400	\$0	\$0	\$14,400	<b>100%</b>
<b>(g)</b>	Other Costs	\$18,506	\$0	\$0	\$18,506	<b>100%</b>
<b>(h)</b>	Construction/Implementation Contingency	\$130,000		\$0	\$130,000	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$501,908</b>	<b>\$422,222</b>	<b>\$0</b>	<b>\$924,130</b>	<b>54%</b>

\*List sources of funding: Corona CIP 2011-2012, Western Municipal Water District

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	4	\$1,712
Program Manager	\$212	6	\$1,274
Sr. Project Manager	\$169	18	\$3,044
Sr. Administrative Assistant	\$108	6	\$651
Administrative Assistant I	\$75	40	\$2,986
Contract Administrator	\$113	18	\$2,037
Chief Financial Officer	\$251	6	\$1,505
Accounting Technician	\$103	24	\$2,463
Data & Information Systems Manager	\$222	6	\$1,331
GIS Analyst	\$139	25	\$3,470
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$20,472</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$22,222</b>

The City of Corona administrative costs associated with the proposed Arlington Desalter Interconnection Project are estimated to cost \$5,760 and will be contributed in-kind by the City. This included one Grant Project Manager for 3 hours per week for 24 weeks = 72 hours x \$80 fully burdened City rate = \$5,760.

**B. Row (b) Land Purchase/Easement**

Not applicable.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

The Arlington Desalter Interconnection Project final design and technical specifications were completed and approved in October 2010 by the City of Corona and are currently at WMWD for final signature. The architect and engineering fees totaled \$77,202 and will be contributed in-kind by the City. The cost associated with the review and approval process of the CDPH operating permits = \$124/hr X 10 hrs for an estimated fee of \$1,240. Building permits will be obtained directly through the City of Corona, and therefore have no fees that will be charged to the Department of Water and Power. All permitting costs will be contributed as an in-kind cost.

**D. Row (d) Construction/Implementation**

Arlington Desalter Interconnection Project Construction Costs are broken down as follows:

Building to house pipes and inter-tie connection	\$150,000
Civil Site Work	\$60,000
Interior Piping, Valves	\$120,000
Exterior Piping, Tie-ins	\$155,000
Chemical Feed and Storage	\$75,000
SCADA/Electrical	\$80,000
Site Clean-up	\$10,000
Sub-Total	\$650,000

Implementation:

Corona DWP staff will oversee the construction contracting process. A Project Engineer at \$120 per hour fully burdened rate (wages plus benefits) at 40 hours total = \$4,800. This is an in-kind match.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

All environmental compliance costs will be contributed in-kind by the City.

**F. Row (f) Construction Administration**

Corona DWP staff will oversee the construction administration. This will include one Project Engineer at \$120 per hour fully burdened rate (wages plus benefits) at 5 hours per week for 24 weeks = \$14,400. This will be provided as an in-kind match from the City.

**G. Row (g) Other Costs**

The City of Corona purchased a Pump for a total cost of \$18,505.75. This will be considered an in-kind contribution to the project.

**H. Row (h) Construction/Implementation Contingency**

The City of Corona DWP has included a 20% contingency in the amount of \$130,000 to cover any unforeseen circumstances with the implementation of the project.

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

## Project (j) Perris II Desalination Facility

Table 7(j) - Project Budget						
Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b>						
Project Title: <b>Perris II Desalination Facility</b>						
Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	\$0	\$55,556	\$0	\$55,556	0%
(b)	Land Purchase/Easement	\$24,361	\$73,083	\$0	\$97,445	25%
(c)	Planning/Design/Engineering/ Environmental Documentation	\$126,306	\$180,230	\$0	\$306,535	41%
(d)	Construction/Implementation	\$482,625	\$746,687	\$0	\$1,229,312	39%
(e)	Environmental Compliance/ Mitigation/Enhancement	\$0	\$0	\$0	\$0	0%
(f)	Construction Administration	\$96,525	\$0	\$0	\$96,525	100%
(g)	Other Costs	\$289,575	\$0	\$0	\$289,575	100%
(h)	Construction/Implementation Contingency	\$193,050	\$0	\$0	\$193,050	100%
(i)	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$1,212,442</b>	<b>\$1,055,556</b>	<b>\$0</b>	<b>\$2,267,997</b>	<b>53%</b>
*List sources of funding: USACOE is providing the funding for design.						

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

**B. Row (b) Land Purchase/Easement**

The EMWD purchased the required land (Assessors Parcel Number 307-210-007) for the Brackish Well 93 on 10/18/2010 for the purchase price of \$95,000.00

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

The EMWD Capital Improvement Program utilizes a standard work breakdown structure which detail 7 Phases from project planning to administrative closeout. The phases are described as such: Facility Planning, Preliminary Design, Final Design, Bid Package Preparation, Bid / Award, Construction, Admin Closeout. The Brackish Well 93 will be constructed under two distinct projects - Well Drilling and Well Equipping. The Project Estimates are summarized in the attachments Drilling Summary Estimates and Equipping Summary Estimates. Since both projects have completed the Facility Planning and Preliminary Design efforts, the summary estimates reflect actual costs. All remaining phases (Final Design through Admin Closeout) are scoped out in the Resource Allocation worksheets attached as Drilling Res Alloc and Equipping Res Alloc. The Resource Allocation worksheets utilize the most recent hourly billing rates for the disciplines needed to design and construct the project. The estimated hours are based on recently completed projects with a similar scope of work. Outside services are based on recently acquired proposals from the consultant team.

**D. Row (d) Construction/Implementation**

The Construction estimates reflect the total construction contract value of \$1,633,500. The Well Drilling is expected to cost approximately \$489,500 while the Well Equipping is estimated at \$1,144,000. The detailed construction estimates are attached as Well 93 Drilling Construction Estimate and Well 93 Equipping Construction Estimate. The estimates reflect Unit Quantities and Unit Prices for each major item required. Since these are Preliminary Design Estimates, a 10% contingency is applied to each estimate to reflect unknowns that will be discovered during Final Design. Construction contingencies are reflected on row h. It should be noted that the Construction estimates assume a well depth of 350 feet which is subject to change due to field conditions.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

Environmental compliance/Mitigation/Enhancement costs will be handled outside of this projects scope and will be wholly covered by the applicant. This project is one component of a multiphase program and is covered under an umbrella CEQA.

**F. Row (f) Construction Administration**

Construction Administration includes all costs related to construction management such as onsite consultants, EMWD Inspection / Contract Management labor, and system integration by EMWD Operations staff. The EMWD labor estimates reflected in the Resource Allocation Worksheets are based on recently completed similar projects. The consultant estimates are based on recently acquired proposals or estimated based on actual costs of recently completed similar projects.

**G. Row (g) Other Costs**

The \$4,152 reflected on Row (g) accounts for expected permit fees and is based on a recently completed similar project.

**H. Row (h) Construction/Implementation Contingency**

Normally this line item is included to handle unknown conditions encountered during construction or implementation of the project and may cover items that are not yet shown in the design. Specify the percentage used for this cost, and provide a reason for using the percentage used. Include only those contingency costs for construction/implementation efforts here. All other contingency costs should be included in the appropriate cost category.

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

## Project (k) Perchlorate Wellhead Treatment System Pipelines

		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$45,000	\$55,556	\$0	\$100,556	<b>45%</b>
<b>(b)</b>	Land Purchase/Easement	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(c)</b>	Planning/Design/Engineering/Environmental Documentation	\$54,000	\$0	\$0	\$54,000	<b>100%</b>
<b>(d)</b>	Construction/Implementation	\$262,000	\$965,000	\$0	\$1,227,000	<b>21%</b>
<b>(e)</b>	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(f)</b>	Construction Administration	\$0	\$35,000	\$0	\$35,000	<b>0%</b>
<b>(g)</b>	Other Costs (Program Management & Monitoring Requirements)	\$60,000	\$0	\$0	\$60,000	<b>100%</b>
<b>(h)</b>	Construction/Implementation Contingency - 10%	\$120,000	\$0	\$0	\$120,000	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$541,000</b>	<b>\$1,055,556</b>	<b>\$0</b>	<b>\$1,596,556</b>	<b>34%</b>

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

WVWD direct project administrative costs for this is a small and straight-forward pipeline project that is all being constructed either in public streets or on the District's existing paved Headquarters site. The admin costs should be easy since the District has several other grants they are completing for the "Complete Well Conveyance and FBR Treatment System" and the administrative tasks should be similar. Therefore, \$45,000 has been allocated for the Administration costs based on the District's previous experience with grants.

**B. Row (b) Land Purchase/Easement**

Not applicable.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

Permitting Support estimated @1% of subtotal = \$12,000. CEQA is already completed but \$12,000 is budgeted for unforeseen issues. Also, Performance Measures and Monitoring Plans are estimated at \$30,000 for a total of \$54,000 for this item.



**D. Row (d) Construction/Implementation**

Engineer's Cost Estimate for Construction of the Project completed at Final Design. See **Att4\_WVWD\_Budget\_2of2.pdf**. Also, for bid documents and preparation, \$30,000 has been budgeted based on the District's previous experience with projects of this size and type.

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

Not applicable.

**F. Row (f) Construction Administration**

The District will administer this construction contract themselves, so therefore, they have budgeted a smaller amount than if they were hiring a construction manager. The \$35,000 budgeted is estimated from previous experience by the District.

**G. Row (g) Other Costs**

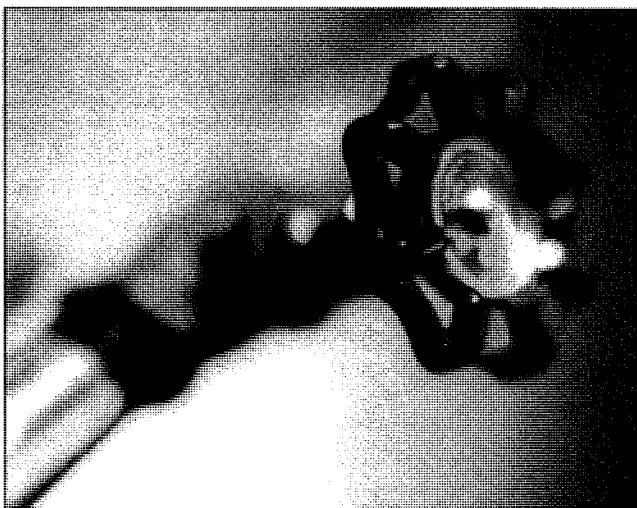
The District is spending \$60,000 to prepare this grant application using engineering consultants and would like to get these costs reimbursed.

**H. Row (h) Construction/Implementation Contingency**

Construction contingency estimated at 10% of the construction cost (\$1,197,000) = \$120k. Typically, this percentage is 15% for most engineering projects that the District constructs. However, because this is a straight-forward pipeline that is all being constructed either in public streets or on the District's existing paved Headquarters site, there should be relatively few unknowns and therefore, a 10% contingency is being used and is considered adequate for this project.

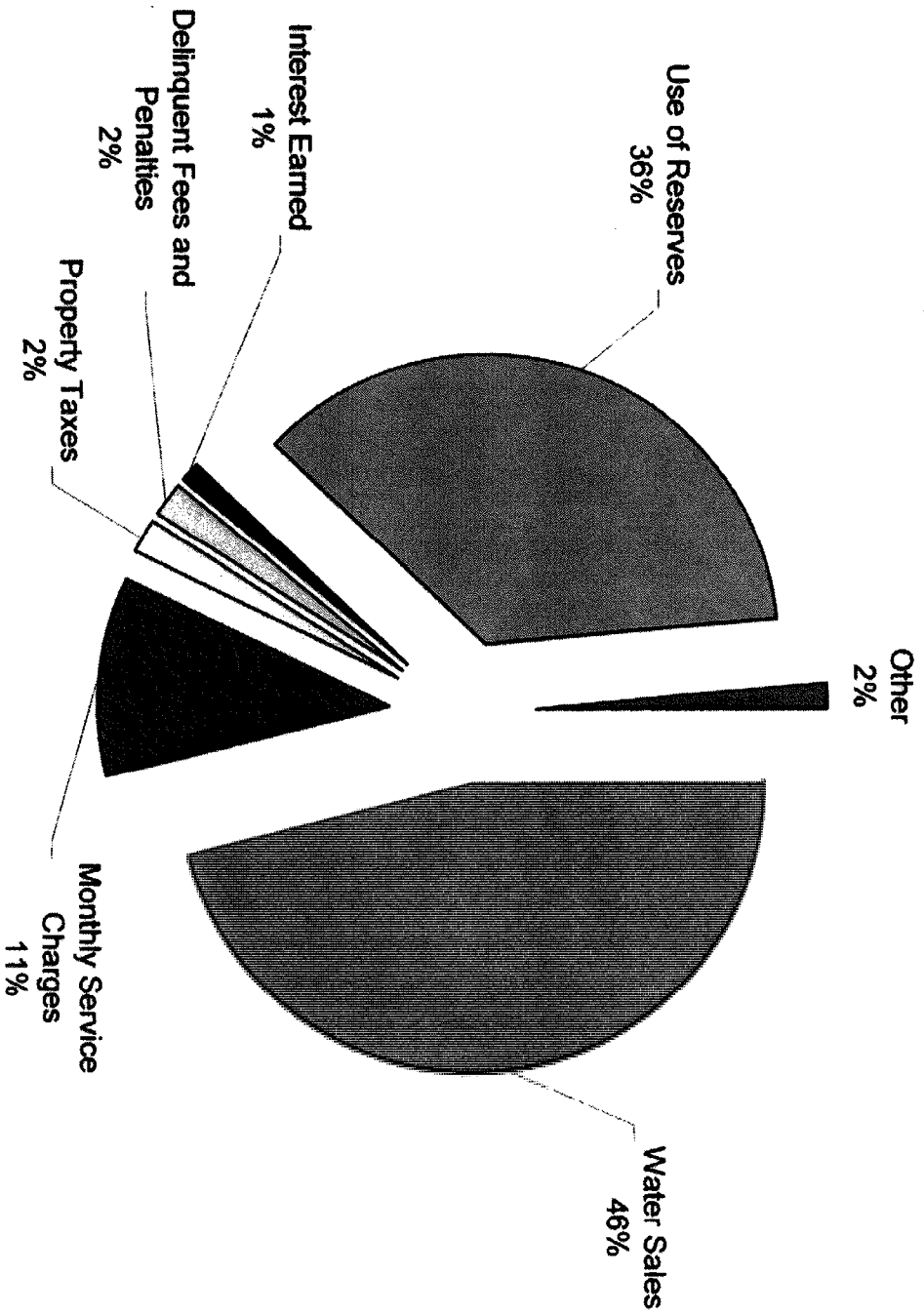
**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

# West Valley Water District



Operating Revenue

# Operating Revenues



### Operating Revenues

Description	FY 2004-2005		FY 2005-2006		FY 2006-2007		FY 2007-2008		FY 2008-2009		FY 2009-2010
	Budget	Actual 6 Months	Budget	Actual 9 Months	Budget	Actual 12 Months	Budget	Actual 12 Months	Budget	Actual 12 Months	Adopted Budget
Revenue for Consumption Related Expenses											
Water Sales											
Domestic Water Sales	\$ 4,000,000	\$ 4,174,224	\$ 8,500,000	\$ 6,598,834	\$ 11,000,000	\$ 8,144,983	\$ 8,500,000	\$ 8,701,253	\$ 8,500,000	\$ 8,480,125	\$ 9,817,500
Hydrant Water Sales	\$ 230,000	\$ 178,522	\$ 350,000	\$ 487,227	\$ 480,000	\$ 226,021	\$ 200,000	\$ 188,659	\$ 150,000	\$ 168,938	\$ 175,000
Reimbursment from City of Rialto for OPR Plant	\$ 65,000	\$ 45,403	\$ 85,000	\$ 17,889	\$ 85,000	\$ 59,311	\$ 80,000	\$ 112,432	\$ 80,000	\$ 186,422	\$ 20,000,000
Pressure Irrigation Water Sales											
Calf Course Irrigation Water Sales											
Unauthorized Water											
Out of District Water Sales											
Irrigation Water Sales	\$ 75,000	\$ 43,881	\$ 65,000	\$ 46,293	\$ 60,000	\$ 25,322	\$ 6,000	\$ 4,955	\$ 5,000	\$ 3,559	\$ 5,000,000
Wholesale Water Sales (Mengoid)	\$ 90,000	\$ 48,975	\$ 90,000	\$ 88,310	\$ 90,000	\$ 140,655	\$ 30,000	\$ 3,565	\$ 1,000	\$ 263	\$ 1,000
Industrial Processed Project Water Sales											
Total Water Sales	\$ 4,500,000	\$ 4,491,005	\$ 10,110,000	\$ 7,240,572	\$ 11,685,000	\$ 8,525,186	\$ 8,715,000	\$ 9,158,746	\$ 8,870,000	\$ 9,036,478	\$ 10,196,500
Revenue for Support Expenses											
Monthly Service Charges											
Domestic Water Monthly Service Charge	\$ 440	\$ 264	\$ 1,000	\$ 45,738	\$ 54,000	\$ 1,863,422	\$ 92,607	\$ 120,316	\$ 80,000	\$ 138,007	\$ 92,400
Fire Service Monthly Service Charge					\$ 20,000	\$ 11,318	\$ 13,000	\$ 15,467	\$ 10,000	\$ 17,244	\$ 12,225
Back Flow Monthly Service Charge						\$ 13,760	\$ 10,000	\$ 15,083	\$ 15,000	\$ 13,379	\$ 10,000
Pressure Irrigation Monthly Service Charge						\$ 3,728	\$ 3,200	\$ 6,616	\$ 4,000	\$ 5,732	\$ 4,000
Golf Course Irrigation Monthly Service Charge						\$ 366	\$ 400	\$ 512	\$ 500	\$ 483	\$ 500
Industrial Processed Project Water Monthly Service Charge						\$ 410	\$ -	\$ -	\$ -	\$ -	\$ -
Total Monthly Service Charges	\$ 440	\$ 264	\$ 1,000	\$ 45,738	\$ 74,000	\$ 1,985,011	\$ 2,098,900	\$ 2,346,734	\$ 2,109,500	\$ 2,579,654	\$ 2,424,225
Non-Recurring Revenue											
Debitant Charges											
Chico Basin Water Rights Lease	\$ 175,000	\$ 91,800	\$ 175,000	\$ 129,483	\$ 150,000	\$ 96,106	\$ 125,000	\$ 331,848	\$ 200,000	\$ 465,679	\$ 300,000
Turn Out/Turn Offs for Non-Payment	\$ 210,000	\$ 118,750	\$ 315,000	\$ 28,862	\$ 537,500	\$ 312,000	\$ 13,000	\$ 89,677	\$ 100,000	\$ -	\$ 100,000
Administration Fees (Section 2017)	\$ 100,000	\$ 120,000	\$ 120,000	\$ 128,045	\$ 120,000	\$ 21,664	\$ 86,059	\$ 86,059	\$ 50,000	\$ 76,341	\$ 84,000
After Hours/Same Day Turn On Charges	\$ 100,000	\$ 55,105	\$ 100,000	\$ 15,983	\$ 25,000	\$ 22,868	\$ 50	\$ 34,705	\$ 20,000	\$ 62,074	\$ 28,500
Reimbursment from Residents for Damages Done	\$ 37,700	\$ 15,377	\$ 37,700	\$ 15,983	\$ 25,000	\$ 28,471	\$ 15,000	\$ 45,812	\$ 10,000	\$ 26,846	\$ 25,000
Reimbursing Materials Sold	\$ 2,000	\$ -	\$ 2,000	\$ 3,907	\$ 2,500	\$ 21,080	\$ 25,000	\$ 41,624	\$ 25,000	\$ 9,330	\$ 15,000
Federal Conservation Grant											
Miscellaneous											
Returned Check Charges											
Plan Check Fees											
Inspection Fees											
Utility Users Tax Administration	\$ 1,500	\$ 1,285	\$ 20,552	\$ 60,467	\$ 65,000	\$ 75,386	\$ 50,000	\$ 24,080	\$ 10,000	\$ 55,992	\$ 5,000
Fire Flow Testing					\$ 2,400	\$ 27,481	\$ 4,000	\$ 6,439	\$ 5,000	\$ 6,914	\$ 2,500
Fines for Unauthorized Water Use					\$ 3,540	\$ 8,200	\$ 1,000	\$ 275	\$ 4,000	\$ 2,100	\$ 2,500
Reimbursment from State for Mandated Claims											
Copies											
Deck Card Fees	\$ 1,000	\$ 547	\$ 1,100	\$ 883	\$ 1,000	\$ 2,108	\$ 2,000	\$ 208	\$ 1,000	\$ 182	\$ 500
Pumped Water Charges											
Document Prep Fees	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 2,000	\$ 125	\$ 500	\$ 248	\$ 500	\$ 527	\$ 500
Contributions to Conservation Demonstration Garden									\$ 100	\$ -	\$ 100
Energy Demand Response Programs											
Facility Charges (now in Capital Budget)	\$ 800,000	\$ 317,635	\$ 1,000,000	\$ 2,066,557	\$ 4,000,000	\$ 1,862,820	\$ -	\$ -	\$ -	\$ 9,563	\$ -
Property Contribution (now in Capital Budget)	\$ 600,000	\$ 385,215	\$ 800,000	\$ 451,109	\$ 480,000	\$ 1,565,324	\$ -	\$ -	\$ -	\$ -	\$ -
EPA Grant (Wellhead Treatment for Perchlorate)	\$ 500,000	\$ 328,076	\$ 178,000	\$ 131,372	\$ 78,670	\$ 74,070	\$ -	\$ -	\$ -	\$ 38,933	\$ -
Prior Year Expense Reimbursment						\$ 35,504	\$ -	\$ -	\$ -	\$ 2,689	\$ -
Unclaimed Customer Refunds (after legal notice)						\$ 19,288	\$ -	\$ -	\$ -	\$ -	\$ -
Franchise Fees (now in Capital Budget)						\$ 18,235	\$ -	\$ -	\$ -	\$ -	\$ -
Reimbursments for Wellhead Treatment (Perchlorate)						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Non-Recurring Revenue	\$ 2,537,200	\$ 1,385,792	\$ 2,767,352	\$ 3,084,648	\$ 5,808,610	\$ 4,713,715	\$ 443,900	\$ 785,387	\$ 544,112	\$ 1,050,303	\$ 658,100
Subtotalled Revenue											
Interest Income on Investments	\$ 210,834	\$ 147,523	\$ 300,000	\$ 458,684	\$ 350,000	\$ 1,614,879	\$ 350,000	\$ 1,591,070	\$ 300,000	\$ 297,604	\$ 275,000
Lease & Lending of Property	\$ 24,000	\$ 11,827	\$ 24,000	\$ 18,358	\$ 24,000	\$ 25,923	\$ 24,000	\$ 24,829	\$ 24,000	\$ 26,116	\$ 24,000
Total Subtotalled Revenue	\$ 234,834	\$ 159,350	\$ 324,000	\$ 465,022	\$ 374,000	\$ 1,640,802	\$ 374,000	\$ 1,615,899	\$ 324,000	\$ 323,720	\$ 299,000

West Valley Water District  
Budget 2008-2010  
Operating Revenues

Description	FY 2004-2005		FY 2005-2006		FY 2006-2007		FY 2007-2008		FY 2008-2009		FY 2009-2010	
	Budget	Actual 6 Months	Budget	Actual 9 Months	Budget	Actual 12 Months	Budget	Actual 12 Months	Budget	Actual 12 Months	Budget	Actual 12 Months
Property Tax Collections												
Property Tax (no EDAF deduction 08-09)	\$ 350,000	\$ 377,496	\$ 198,506	\$ 268,303	\$ 864,082	\$ 1,032,527	\$ 864,082	\$ 1,168,428	\$ 646,062	\$ 1,201,087	\$ 486,047	\$ 486,047
Crestmore Heights AD 97-1			\$ 50,000	\$ 28,246	\$ 45,022	\$ 51,611	\$ 45,022	\$ 46,465	\$ 50,200	\$ 52,331	\$ 48,000	\$ 48,000
Redevelopment Pass Through						14,420		38,694		61,127		
Total Property Tax Collections	\$ 350,000	\$ 377,496	\$ 248,506	\$ 296,549	\$ 909,104	\$ 1,098,558	\$ 909,104	\$ 1,254,574	\$ 696,262	\$ 1,314,545	\$ 534,047	\$ 534,047
From District Reserves			\$ 647,500				\$ 4,947,511	\$ 3,310,592	\$ 5,846,430	\$ 4,806,544	\$ 8,004,839	\$ 8,004,839
From Weirhead Treatment (Perforate) Reserves			\$ 845,550				\$ 4,947,511	\$ 3,310,592	\$ 5,846,430	\$ 4,806,544	\$ 8,004,839	\$ 8,004,839
Total Operating Revenue Budget	\$ 11,622,474	\$ 6,413,907	\$ 15,142,385	\$ 11,102,528	\$ 18,650,714	\$ 18,263,274	\$ 17,482,415	\$ 18,472,710	\$ 18,392,304	\$ 19,151,244	\$ 22,126,711	\$ 22,126,711

## Table of Contents and Summary

Operating and Capital Budgets for Fiscal Year 2009-2010

### Operations Budget

#### Consumption Related

Revenues	Page	Budget
Domestic Water Sales	1	\$ 9,817,500
Hydrant Water Sales	1	\$ 175,000
Pressure Irrigation Water Sales	1	\$ 68,000
Golf Course Irrigation Water Sales	1	\$ 60,000
Unauthorized Water	1	\$ 50,000
Reimbursement from City of Rialto for OPR Plant	1	\$ 20,000
Out of District Water Sales	1	\$ 5,000
Irrigation Water Sales	1	\$ 1,000

Page	Expenses	Budget
4	Pumping	\$ 2,284,626
6	Wellhead Treatment (Perchlorate)	\$ 1,324,169
8	Transmission & Distribution	\$ 1,221,766
10	Water Treatment	\$ 692,758
12	Roemer Treatment Plant	\$ 663,146
14	Source of Supply	\$ 642,000
16	Pump Station 3A1	\$ 134,948
18	Wellhead Treatment (Arsenic)	\$ 122,977
42	Debt Service - Consumption	\$ 2,195,378
20	Capital Recovery - Consumption	\$ 4,977,847
		<u>\$ 14,259,615</u>

### Support Operations

Revenues	Page	Budget
Domestic Water Monthly Service Charge	1	\$ 2,310,000
Property Tax	2	\$ 486,047
Delinquent Charges	1	\$ 300,000
Interest Income on Investments	1	\$ 275,000
Chino Basin Water Rights Lease	1	\$ 100,000
Fire Service Monthly Service Charge	1	\$ 92,400
Turn On/Turn Offs for Non-Payment	1	\$ 84,000
Administration Fees (Section 2017)	1	\$ 50,000
Crestmore Heights AD 97-1	2	\$ 48,000
After Hours/Same Day Turn On Charges	1	\$ 28,500
Reimbursement from Residents for Damages Done	1	\$ 25,000
Rental & Leasing of Property	1	\$ 24,000
Back Flow Monthly Service Charge	1	\$ 17,325
Recycling Materials Sold	1	\$ 15,000
Federal Conservation Grant	1	\$ 10,000
Miscellaneous	1	\$ 10,000
Hydrant Water Monthly Service Charge	1	\$ 10,000
Returned Check Charges	1	\$ 10,000
Plan Check Fees	1	\$ 8,000
Inspection Fees	1	\$ 5,000
Utility Users Tax Administration	1	\$ 5,000

Page	Expenses	Budget
20	General Operations	\$ 1,982,568
20	Capital Recovery - General Ops	\$ 553,094
22	Administration	\$ 974,952
24	Conservation	\$ 92,919
26	Meter Reading	\$ 868,076
28	Engineering	\$ 706,685
30	Customer Service	\$ 601,284
32	Information Technology	\$ 473,325
34	Accounting	\$ 458,354
36	Billing	\$ 435,843
38	Human Resources/Safety	\$ 298,505
40	Board of Directors	\$ 140,609
42	Debt Service - General Ops	\$ 280,882

**Revenues**

	Page	Budget
Pressure Irrigation Monthly Service Charge	1	\$ 4,000
Fire Flow Testing	1	\$ 2,500
Fines for Unauthorized Water Use	1	\$ 2,500
Reimbursement from State for Mandated Claims	1	\$ 1,000
Copies	1	\$ 500
Golf Course Irrigation Monthly Service Charge	1	\$ 500
Debit Card Fees	1	\$ 500
Pulled Meter Charges	1	\$ 500
Document Prep Fees	1	\$ 100
Prior Year Expense Reimbursement	1	\$ -
Redevelopment Pass-Through	2	\$ -
		\$ 3,925,372

Total Before Reserves

\$ 14,121,872

From District Reserves

2 \$ 8,004,839

**Total Operations Budget**

\$ 22,126,711

**Capital Improvement Budget****Revenues**

From Capital Recovery  
From Bond Proceeds  
From District Reserves  
**Total Capital Budget**

52	\$ 1,780,000
52	\$ 5,530,941
52	\$ 2,561,359
52	\$ (97,347)
	\$ 9,774,953

**Expenses**

44 List of Projects

\$ 9,774,953

\$ 9,774,953

**Grand Total Operations and Capital Improvement Budgets****Revenues**

Revenues  
From Capital Recovery  
From Bond Proceeds  
From District Reserves  
**Grand Total**

\$ 15,901,872
\$ 5,530,941
\$ 2,561,359
\$ 7,907,492
\$ 31,901,664

**Expenses**

Operations  
Capital Improvements

\$ 22,126,711  
\$ 9,774,953

\$ 31,901,664

# Project (k) Perchlorate Wellhead Treatment System Pipelines (WVWD)

## Preliminary Cost Estimate for the FBR Treatment Plant

		LF	Cost	Total
<b>Water</b>	8" Service	190	\$60	\$11,400
	6" Double Detector Check			\$10,000
				<b>\$21,400</b>
<b>Electrical</b>				<b>\$30,000</b>
<b>Sewer</b>	8" Sewer	1100	\$120	\$132,000
	Manholes	10	\$5,000	\$50,000
	Connections	2	\$10,000	\$20,000
				<b>\$202,000</b>
<b>Paving</b>	w/ base	18300 sqft		\$100,000
	Concrete	1200	\$10	\$12,000
	AC Berm	400	\$20	\$8,000
				<b>\$120,000</b>
<b>Retaining Wall</b>	8' High	100	\$200	\$20,000
	Backfill	100	\$50	\$5,000
				<b>\$25,000</b>
<b>Drains</b>	12" Drain	300	\$50	\$15,000
	Catch Basin	3	\$2,000	\$6,000
				<b>\$21,000</b>
<b>Install 16" Waterlines</b>				<b>\$670,480</b>
<b>Flood Control</b>	Rip Rap			\$5,000
	Land			
<b>Fence</b>				<b>\$3,000</b>
<b>Remove</b>	Concrete Slab			
	Retaining Wall			
	Block Pipe Supports			<b>\$20,000</b>
<b>Remove</b>	16" Waterline	280	\$50	<b>\$14,000</b>
<b>Relocate</b>	Gas			\$27,000
	Diesel			\$27,000
				<b>\$54,000</b>
<b>Regrading</b>	Remove	200	\$10	\$2,000
	Recompact	200	\$20	\$4,000
	Pavement	200		\$5,000
				<b>\$11,000</b>
<b>Subtotal</b>				<b>\$1,197,000</b>



## Project (I) Chino Creek Wellfield Development

<p align="center"><b>Table 7(l) - Project Budget</b></p> <p>Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b></p> <p align="center">Project Title: <b>Chino Creek Wellfield Development</b></p>						
Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$7,600	\$55,556	\$0	\$63,156	<b>12%</b>
<b>(b)</b>	Land Purchase/Easement	\$450,000	\$0	\$0	\$450,000	<b>100%</b>
<b>(c)</b>	Planning/Design/Engineering/Environmental Documentation	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(d)</b>	Construction/Implementation	\$4,002,562	\$1,000,000	\$0	\$5,002,562	<b>80%</b>
<b>(e)</b>	Environmental Compliance/Mitigation/Enhancement	\$165,000	\$0	\$0	\$165,000	<b>100%</b>
<b>(f)</b>	Construction Administration	\$150,100	\$0	\$0	\$150,100	<b>100%</b>
<b>(g)</b>	Other Costs	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(h)</b>	Construction/Implementation Contingency	\$500,300	\$0	\$0	\$500,300	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$5,275,562</b>	<b>\$1,055,556</b>	<b>\$0</b>	<b>\$6,331,118</b>	<b>83%</b>

\*List sources of funding: Non-State Share Funding has been budgeted in Western's Capital Improvement Plan.

**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

WMWD direct project administrative costs are as follows:

<b>Task</b>	<b>Cost</b>
Task 1: Administration	\$ -
Task 2: Labor Compliance Program	\$ 3,600.00
Task 3: Reporting	\$ 4,000.00
Task 4: Monitoring Plan, Project Assessment and Evaluation Plan and Quality Assurance Project Plan (QAPP)	\$ 1,000.00
<b>Total</b>	<b>\$ 7,600.00</b>

**Note:**

Costs for Task 1 is zero, because this task will be performed by Western Municipal Water District staff as part of their regular duties. Cost for Task 2 is based on the cost for a third party administrator used on a similar project. Task 3 is based on an estimate from the contractor who has assisted Western with their IRWMP Prop 50 grant. Task 4 will be performed by a contractor. Task 4 expense is expected to be minimal because these documents were completed during previous phases of the Chino Creek Well-field Development and few revisions are anticipated.

**B. Row (b) Land Purchase/Easement**

Task	\$/SF	SF	Land Cost
1. Permanent Easement Cost			
2. Land Purchase	\$ 10.00	45000	\$ 450,000

**Note:**

Costs for Task 2 were developed as part of the Preliminary Design Report. It assumes the purchase of 3, 15,000 square foot sites.

**C. Row (c) Planning/Design/Engineering/Environmental Documentation**

Task	Costs
1. Preliminary Design	\$0
2. Design	\$0
3. Environmental Documentation	\$0
<b>Total</b>	<b>\$0</b>

**Note:**

The preliminary design of CCWF Wells 1 to 3 was included in the pre-design for a larger umbrella project. It is not possible for Western to "breakout" just the costs for Wells 1 to 3, hence Western is not seeking reimbursement or credit for match for Task 1. Well design (Task 2) was completed as part of an earlier project and Western will not seek reimbursement or credit for match for design costs. CEQA documentation was undertaken as part of another grant program and Western will not seek reimbursement or credit for match for environmental documentation.

**D. Row (d) Construction/Implementation**

Item/Description	Unit	Unit Price	Well 1		Well 2		Well 3	
			Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
<b>Well Drilling</b>								
Mobilization/ Demobilization	LS	\$60,000	1	\$60,000	1	\$60,000	1	\$60,000
Drill 48" Conductor Borehole w/Casing	LF	\$550	50	\$27,500	50	\$27,500	50	\$27,500
Drill 17.5" Pilot Borehole	LF	\$60	350	\$21,000	350	\$21,000	350	\$21,000
Borehole Logs	LS	\$5,500	1	\$5,500	1	\$5,500	1	\$5,500
Install Aquifer Zones	EA	\$8,000	3	\$24,000	3	\$24,000	3	\$24,000
Pump Each Zone	HR	\$300	54	\$16,200	54	\$16,200	54	\$16,200
Zone Water Quality Testing	EA	\$3,000	3	\$9,000	3	\$9,000	3	\$9,000

## Attachment 4 Budget

Ream Pilot Borehole for 28"	FT	\$50	350	\$17,500	350	\$17,500	350	\$17,500
Caliper Survey	LS	\$2,250	1	\$2,250	1	\$2,250	1	\$2,250
18"Casing	LF	\$434	171	\$74,214	171	\$74,214	171	\$74,214
18"Screen	LF	\$533	179	\$95,407	179	\$95,407	179	\$95,407
Sounding Tube	LF	\$67	149	\$9,983	149	\$9,983	149	\$9,983
Filter Pack	LF	\$40	400	\$16,000	400	\$16,000	400	\$16,000
Develop Well (airlifting)	HR	\$325	96	\$31,200	96	\$31,200	96	\$31,200
Test Pump	LS	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
Develop Well (pumping)	HR	\$275	60	\$16,500	60	\$16,500	60	\$16,500
Pumping Test	HR	\$275	38	\$10,450	38	\$10,450	38	\$10,450
Spinner Survey	LS	\$4,500	1	\$4,500	1	\$4,500	1	\$4,500
Title 22 Water Quality Analysis	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Complete Wellhead	LS	\$2,500	1	\$2,500	1	\$2,500	1	\$2,500
Video Survey	LS	\$2,000	1	\$2,000	1	\$2,000	1	\$2,000
<b>Equip Well</b>								
Pumps/Piping and Associated Equip.	LS	\$326,000	1	\$326,000	1	\$326,000	1	\$326,000
<b>Building</b>								
Building	SF	\$450	400	\$180,000	400	\$180,000	400	\$180,000
<b>Site Work</b>								
Mobilization/ Demobilization	LS	\$60,000	1	\$60,000	1	\$60,000	1	\$60,000
Concrete Work	CY	\$800	9	\$7,200	9	\$7,200	9	\$7,200
Fencing	LF	\$50	400	\$20,000	400	\$20,000	400	\$20,000
20' Gate	LS	\$4,000	1	\$4,000	1	\$4,000	1	\$4,000
Grading	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Pavement	SF	\$5	2000	\$10,000	2000	\$10,000	2000	\$10,000
Gravel	SF	\$1	8000	\$8,000	8000	\$8,000	8000	\$8,000
12" PVC Pipe	LF	\$115	150	\$17,250	150	\$17,250	500	\$57,500
12" BFV	EA	\$1,500	1	\$1,500	1	\$1,500	1	\$1,500
Connection to Existing Piping	LS	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
<b>Pump-to-Waste Site Piping</b>								
8" PVC Pipe	LF	\$92	50	\$4,600	50	\$4,600	50	\$4,600
8" DIP	LF	\$100	10	\$1,000	10	\$1,000	10	\$1,000
8" DI 90 Deg. Bend	EA	\$1,300	3	\$3,900	3	\$3,900	3	\$3,900

## Attachment 4 Budget

Air Gap Structure	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
16" PVC	LF	\$133	150	\$19,950	150	\$19,950	150	\$19,950
Electrical & Instrumentation	LS	\$174,000	1	\$174,000	1	\$174,000	1	\$174,000
Contractor OH/Profit	LS	\$316,000	1	\$316,000	1	\$316,000	1	\$316,000
<b>Total Estimated Construction Cost</b>				<b>\$1,654,104</b>		<b>\$1,654,104</b>		<b>\$1,694,354</b>

## E. Row (e) Environmental Compliance / Mitigation/ Enhancement

Item/Description	Unit	Unit Price	Well 1		Well 2		Well 3	
			Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
Noise Control	LS	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
Drill Cutting Disposal	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
NPDES Compliance	LS	\$15,000	1	\$15,000	1	\$15,000	1	\$15,000
<b>Total Cost</b>				<b>\$55,000</b>		<b>\$55,000</b>		<b>\$55,000</b>

## F. Row (f) Construction Administration

Item	Cost
Construction Administration and Inspection	\$150,100

**Note:**

Cost includes construction management and as-needed inspection. Costs assumed to be 3% of construction costs.

## G. Row (g) Other Costs

Not applicable.

## H. Row (h) Construction/Implementation Contingency

Item	Cost
Contingency (10%)	\$500,300

**Note:**

The proposed project is at Pre-final design (approximately 90%). Because the design is relatively advanced a small construction contingency is assumed.

## I. Row (i) Grand Total (Sum rows (a) through (h) for each column)

# Project (I) Chino Creek Wellfield Development (WMWD)

## Chino Creek Wellfield Wells 1 to 3 Exhibit B Detail

### (a) Direct Administration

Chino Creek Wellfield Development Project Wells 1, 2, and 3

Task	Cost
Task 1: Administration	\$ -
Task 2: Labor Compliance Program	\$ 1,200.00
Task 3: Reporting	\$ 4,000.00
Task 4: Monitoring Plan, Project Assessment and Evaluation Plan and Quality Assurance Project Plan (QAPP)	\$ -
<b>Total</b>	<b>\$ 5,200.00</b>

Back-up Calculations						
# of hours	\$/hr for administrator	Equipment/Supplies for Administration	OR	% of Total Project Cost	Total Project Cost	Justification for %

#### Notes:

Costs for Task 1 is zero, because this task will be performed by Western Municipal Water District staff as part of their regular duties. Cost for Task 2 is based on the cost for a third party administrator used on a like project. Task 3 is based on an estimate from the contractor who has assisted Western with their IRWMP Prop 50 grant. Task 4 is also zero because these documents were completed during previous phases of the Chino Creek Wellfield Development and no revisions are anticipated.

### (b) Land Purchase/Easement

Task	\$/Acre	Acres	Land Cost
1. Permanent Easement Cost			
2. Land Purchase	\$ 400,000.00	0.75	\$ 300,000.00

#### Notes:

Costs for Task 2 were developed as part of the Preliminary Design Report. It assumes the purchase of 3, 0.25 acre sites.

### (c ) Planning/Design/Engineering/Environmental Documentation

	Costs
1. Preliminary Design	\$0
2. Design	\$0
3. Environmental Documentation	\$0
<b>Total</b>	<b>\$0</b>

#### Notes:

The preliminary design of CCWF Wells 1 to 3 was included in the predesign for a larger umbrella project. It is not possible for Western to "breakout" just the costs for Wells 1 to 3, hence Western is not seeking reimbursement or credit for match for Task 1. Well design (Task 2) was completed as part of an earlier project and Western will not seek reimbursement or credit for match for design costs. CEQA documentation was undertaken as part of another grant program and Western will not seek reimbursement or credit for match for environmental documentation.

### (d) Construction/Implementation

Item/Description	Unit	Unit Price	Well 1		Well 2		Well 3	
			Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
<b>Well Drilling</b>								
Mobilization/Demobilization	LS	\$60,000	1	\$60,000	1	\$60,000	1	\$60,000
Drill 48" Conductor Borehole w/Casing	LF	\$550	50	\$27,500	50	\$27,500	50	\$27,500
Drill 17.5" Pilot Borehole	LF	\$60	650	\$39,000	650	\$39,000	650	\$39,000
Borehole Logs	LS	\$5,500	1	\$5,500	1	\$5,500	1	\$5,500
Install Aquifer Zones	EA	\$8,000	3	\$24,000	3	\$24,000	3	\$24,000
Pump Each Zone	HR	\$300	54	\$16,200	54	\$16,200	54	\$16,200
Zone Water Quality Testing	EA	\$3,000	3	\$9,000	3	\$9,000	3	\$9,000
Ream Pilot Borehole for 28"	FT	\$50	650	\$32,500	650	\$32,500	650	\$32,500
Caliper Survey	LS	\$2,250	1	\$2,250	1	\$2,250	1	\$2,250
18"Casing	LF	\$434	171	\$74,214	171	\$74,214	171	\$74,214
18"Screen	LF	\$533	510	\$271,830	510	\$271,830	510	\$271,830
SoundingTube	LF	\$67	149	\$9,983	149	\$9,983	149	\$9,983
FilterPack	LF	\$40	700	\$28,000	700	\$28,000	700	\$28,000
Develop Well (airlifting)	HR	\$325	96	\$31,200	96	\$31,200	96	\$31,200

**Chino Creek Wellfield Wells 1 to 3**  
**Exhibit B Detail**

Test Pump	LS	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
Develop Well (pumping)	HR	\$275	60	\$16,500	60	\$16,500	60	\$16,500
Pumping Test	HR	\$275	38	\$10,450	38	\$10,450	38	\$10,450
Spinner Survey	LS	\$4,500	1	\$4,500	1	\$4,500	1	\$4,500
Title 22 Water Quality Analysis	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Complete Wellhead	LS	\$2,500	1	\$2,500	1	\$2,500	1	\$2,500
Video Survey	LS	\$2,000	1	\$2,000	1	\$2,000	1	\$2,000
<b>Equip Well</b>								
Pumps/Piping and Associated Equip.	LS	\$326,000	1	\$326,000	1	\$326,000	1	\$326,000
<b>Building</b>								
Building	SF	\$450	400	\$180,000	400	\$180,000	400	\$180,000
<b>Site Work</b>								
Mobilization/Demobilization	LS	\$60,000	1	\$60,000	1	\$60,000	1	\$60,000
Concrete Work	CY	\$800	9	\$7,200	9	\$7,200	9	\$7,200
Fencing	LF	\$50	400	\$20,000	400	\$20,000	400	\$20,000
20' Gate	LS	\$4,000	1	\$4,000	1	\$4,000	1	\$4,000
Grading	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Pavement	SF	\$5	2000	\$10,000	2000	\$10,000	2000	\$10,000
Gravel	SF	\$1	8000	\$8,000	8000	\$8,000	8000	\$8,000
12" PVC Pipe	LF	\$115	150	\$17,250	150	\$17,250	500	\$57,500
12" BFV	EA	\$1,500	1	\$1,500	1	\$1,500	1	\$1,500
Connection to Existing Piping	LS	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
<b>Pump-to-Waste Site Piping</b>								
8" PVC Pipe	LF	\$92	50	\$4,600	50	\$4,600	50	\$4,600
8" DIP	LF	\$100	10	\$1,000	10	\$1,000	10	\$1,000
8" DI 90 Deg. Bend	EA	\$1,300	3	\$3,900	3	\$3,900	3	\$3,900
Air Gap Structure	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
16" PVC	LF	\$133	150	\$19,950	150	\$19,950	150	\$19,950
Electrical & Instrumentation	LS	\$174,000	1	\$174,000	1	\$174,000	1	\$174,000
Contractor OH/Profit	LS	\$316,000	1	\$316,000	1	\$316,000	1	\$316,000
<b>Total Estimated Construction Cost</b>				<b>\$1,875,527</b>		<b>\$1,875,527</b>		<b>\$1,915,777</b>

**(e) Environmental Compliance/Mitigation/Enhancement**

Item	Unit	Unit Price	Well 1		Well 2		Well 3	
			Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
Noise Control	LS	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
Drill Cutting Disposal	LS	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
NPDES Compliance	LS	\$15,000	1	\$15,000	1	\$15,000	1	\$15,000
<b>Total Cost</b>				<b>\$55,000</b>		<b>\$55,000</b>		<b>\$55,000</b>

**(f) Construction Administration**

Item	Cost
Construction Administration and Inspection	\$170,004.93

**Notes:**

Cost includes construction management and as-needed inspection. Costs assumed to be 3% of construction costs.

**(g) Other Costs**

Item	Cost

**(h) Construction/Implementation Contingency**

Item	Cost
Contingency (10%)	\$566,683.1

**Notes:**

The proposed project is at Pre-final design (approximately 90%). Because the design is relatively advanced a small construction contingency is assumed.

### Project (m) Impaired Groundwater Recovery

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
<b>(a)</b>	Direct Project Administration Costs	\$751,300	\$55,556	\$0	\$806,856	<b>93%</b>
<b>(b)</b>	Land Purchase/Easement	\$4,300,000	\$0	\$0	\$4,300,000	<b>100%</b>
<b>(c)</b>	Planning/Design/Engineering/Environmental Documentation	\$2,129,700	\$0	\$0	\$2,129,700	<b>100%</b>
<b>(d)</b>	Construction/Implementation	\$22,408,000	\$1,000,000	\$0	\$23,408,000	<b>96%</b>
<b>(e)</b>	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(f)</b>	Construction Administration	\$1,100,000	\$0	\$0	\$1,100,000	<b>100%</b>
<b>(g)</b>	Other Costs	\$0	\$0	\$0	\$0	<b>0%</b>
<b>(h)</b>	Construction/Implementation Contingency	\$4,681,000	\$0	\$0	\$4,681,000	<b>100%</b>
<b>(i)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$35,370,000</b>	<b>\$1,055,556</b>	<b>\$0</b>	<b>\$36,425,556</b>	<b>97%</b>



**A. Row (a) Direct project Administration Costs**

Santa Ana Watershed Project Authority direct project administration costs to be funded through the grant are estimated based upon previous experience in administering the Proposition 13 and 50 grant programs.

<b>SAWPA Project Administration</b>	<b>Projected Hourly Wage</b>	<b>Total Hrs</b>	<b>Total Wages</b>
General Manager	\$428	6	\$2,568
Program Manager	\$212	20	\$4,246
Sr. Project Manager	\$169	60	\$10,148
Sr. Administrative Assistant	\$108	22	\$2,386
Administrative Assistant I	\$75	136	\$10,152
Contract Administrator	\$113	20	\$2,263
Chief Financial Officer	\$251	20	\$5,016
Accounting Technician	\$103	74	\$7,596
Data & Information Systems Manager	\$222	20	\$4,435
GIS Analyst	\$139	36	\$4,997
<b>SAWPA Project Administration:</b>		<b>655</b>	<b>\$53,806</b>
<b>Other SAWPA Project Administration Costs</b>		Supplies	\$500
		Travel	\$1,250
<b>Total SAWPA Project Administration Costs</b>			<b>\$55,556</b>

IRWD direct project administrative costs are as follows:

	<b>\$/hr</b>	<b>Quantity</b>	<b>Total</b>
Director of Water Resource/Planning	\$ 72.00	85	\$ 6,120
Principal Water Resources Manager	\$ 58.00	100	\$ 5,800
Principal Engineer	\$ 55.00	1700	\$ 93,500
Senior Engineer	\$ 50.00	1700	\$ 85,000
Laboratory Manager	\$ 46.00	140	\$ 6,440
Energy & Water Resource Planner	\$ 46.00	140	\$ 6,440
Electrical & Controls Project Mgr	\$ 46.00	140	\$ 6,440
Electrical Maint manager	\$ 46.00	80	\$ 3,680
Laboratory Supervisor	\$ 43.00	80	\$ 3,440
Assistant Planner/Engineer	\$ 43.00	80	\$ 3,440
Laboratory QA/QC	\$ 38.00	80	\$ 3,040
Senior Scientist	\$ 36.00	80	\$ 2,880
Sr Electrician/Instrumentation Tech	\$ 36.00	80	\$ 2,880
Public Affairs Specialist	\$ 36.00	40	\$ 1,440
Engineering Tech III	\$ 32.00	60	\$ 1,920

## Attachment 4 Budget

Scientist	\$ 31.00	60	\$ 1,860
Collection Systems Technician II	\$ 26.00	40	\$ 1,040
Collection Systems Technician I	\$ 22.00	40	\$ 880
Office Specialist	\$ 22.00	40	\$ 880
Utility Worker	\$ 21.00	30	\$ 630
			<hr/>
			\$ 237,750

Fringe Benefits 189% of labor \$ 449,348

Travel	\$ 7,200
Equipment	\$ 34,000
Supplies and Materials	\$ 23,000
	<hr/>
	\$ 64,200

Total Direct Project Administration Costs \$751,300

### B. Row (b) Land Purchase/Easement

Land acquisition \$ 4,300,000

### C. Row (c) Planning/Design/Engineering/Environmental Documentation

	\$/hr	Quantity	Total
Principal Engineer	\$ 90.00	300	\$ 27,000
Project Manager	\$ 75.00	1400	\$ 105,000
Project Engineer	\$ 60.00	1500	\$ 90,000
Associate Engineer	\$ 50.00	1200	\$ 60,000
Staff Engineer	\$ 45.00	1000	\$ 45,000
Staff Engineer II	\$ 50.00	1200	\$ 60,000
Electrical Engineer	\$ 45.00	1400	\$ 63,000
Electrical Engineer II	\$ 45.00	1100	\$ 49,500
Structural Engineer	\$ 50.00	1000	\$ 50,000
Structural Engineer II	\$ 45.00	1000	\$ 45,000
CADD Drafter	\$ 34.00	1000	\$ 34,000
CADD Drafter II	\$ 34.00	2100	\$ 71,400
Clerical	\$ 25.00	400	\$ 10,000
			<hr/>
			\$ 709,900

Fringe Benefits - 200% \$ 1,419,800

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\$ 2,129,700

## D. Row (d) Construction/Implementation

<b>Wells 21 and 22 Wellhead Equipping</b>				
<b>Well 21</b>				
<b><u>General</u><sup>2,3</sup></b>				<b><u>\$81,500</u></b>
Mobilization/Demobilization	1	LS	\$65,000	\$65,000
Bonding and Insurance	1	LS	\$16,500	\$16,500
<b><u>Site Work</u></b>				<b><u>\$160,950</u></b>
Excavation and Clearing	1	LS	\$8,000	\$8,000
Site Paving Materials	6800	SF	\$5.50	\$37,400
Concrete Swales for Site Drainage	300	LF	\$40	\$12,000
Concrete Driveway	15	CY	\$550	\$8,250
Manway	1	EA	\$2,500	\$2,500
Switchgear and Transformer Concrete Pads	1	LS	\$3,500	\$3,500
Concrete Well Block <sup>6</sup>	1	LS	\$6,500	\$6,500
Discharge Piping Concrete Pad	7	CY	\$400	\$2,800
Electrical Building w/HVAC	200	SF	\$400	\$80,000
<b><u>Mechanical</u><sup>4</sup></b>				<b><u>\$633,300</u></b>
400 HP Submersible Pump and Motor Equipment	1	EA	\$350,000	\$350,000
270 ft of 12-Inch steel well pump column piping	270	LF	\$200	\$54,000
18-Inch Steel Discharge Head and Wellhead Piping	1	LS	\$12,500	\$12,500
12-Inch Steel Pump to Waste Piping/Manholes	1	LS	\$15,000	\$15,000
24-Inch C-905 PVC Well Discharge Piping to Untreated Water Transmission Line	50	LF	\$180	\$9,000
12-Inch Steel Well Pump to Waste Piping	60	LF	\$110	\$6,600
12-Inch Double Check Assembly	1	EA	\$14,000	\$14,000
Pump to Waste Storm Drain Connection	1	EA	\$15,000	\$15,000
18-Inch Motor Operated Isolation Valve	1	EA	\$19,500	\$19,500
12-Inch Motor Operated Isolation Valve	1	EA	\$12,500	\$12,500
8-Inch Well Isolation Valve	1	EA	\$4,200	\$4,200
18-Inch Magnetic Flow Meter	1	EA	\$20,000	\$20,000
8-Inch Well Pressure Relief Valve	1	EA	\$13,500	\$13,500
3-Inch Well Anti-Surge Air Relief/Vacuum Assembly	1	EA	\$5,000	\$5,000
3-Inch Well Air Relief/Vacuum Assembly	1	EA	\$2,500	\$2,500
Bladder Type Surge Tank Assembly (Assumed 500 Gal)	1	EA	\$60,000	\$60,000
Miscellaneous Couplings, Taps etc	1	LS	\$20,000	\$20,000
<b><u>Electrical</u></b>				<b><u>\$750,100</u></b>
Electric Utility Connection fee	1	LS	\$3,000	\$3,000
400HP 18-pulse VFD	1	EA	\$250,000	\$250,000
4160V Metered Switchboard	1	EA	\$200,000	\$200,000
120/208V 3 phase lighting panel	1	EA	\$2,200	\$2,200

## Attachment 4 Budget

4160V-120/208V 3 phase dry type transformer	1	EA	\$40,000	\$40,000
Concrete pad (for Utility transformer)	1	EA	\$7,000	\$7,000
Conduit and Wire	1	LS	\$100,000	\$100,000
Lighting	1	LS	\$12,000	\$12,000
Ground Rod System	1	EA	\$900	\$900
Receptacles, switches, junction boxes, etc.	1	LS	\$5,000	\$5,000
Instrumentation	1	LS	\$10,000	\$10,000
Control Panel, including PLC, UPS, etc.	1	EA	\$90,000	\$90,000
PLC Programming	1	LS	\$30,000	\$30,000
<b>Subtotal Well 21 - Wellhead Equipping</b>				<b>\$1,625,850</b>
<b>Well 22</b>				
<b><u>General<sup>2</sup></u></b>				<b><u>\$57,000</u></b>
Mobilization/Demobilization	1	LS	\$45,000	\$45,000
Bonding and Insurance	1	LS	\$12,000	\$12,000
<b><u>Site Work</u></b>				<b><u>\$152,700</u></b>
Excavation and Clearing	1	LS	\$8,000	\$8,000
Site Paving Materials	6800	SF	\$5.50	\$37,400
Concrete Swales for Site Drainage	300	LF	\$40	\$12,000
Manway	1	EA	\$2,500	\$2,500
Switchgear and Transformer Concrete Pads	1	LS	\$3,500	\$3,500
Concrete Well Block	1	LS	\$6,500	\$6,500
Discharge Piping Concrete Pad	7	CY	\$400	\$2,800
Electrical Building w/HVAC	200	SF	\$400	\$80,000
<b><u>Mechanical<sup>4</sup></u></b>				<b><u>\$515,200</u></b>
250 HP Submersible Pump and Motor Equipment	1	EA	\$235,000	\$235,000
460 ft of 10-Inch EL&C steel well pump column piping	460	LF	\$190	\$87,400
12-Inch Steel Discharge Head and Wellhead Piping	1	LS	\$6,500	\$6,500
10-Inch Steel Pump to Waste Piping	1	LS	\$3,000	\$3,000
16-Inch Steel/PVC Well Discharge Piping to Untreated Water Transmission Line in Mitchell Ave	100	LF	\$120	\$12,000
16-Inch PVC Well Pump to Waste Piping to Storm Drain Connection/Manhole	1	LS	\$17,500	\$17,500
10-Inch Double Check Assembly	1	EA	\$12,500	\$12,500
Pump to Waste Storm Drain Connection	1	EA	\$10,000	\$10,000
12-Inch Motor Operated Isolation Valve	1	EA	\$12,500	\$12,500
10-Inch Motor Operated Isolation Valve	1	EA	\$11,000	\$11,000
6-Inch Well Isolation Valve	1	EA	\$3,500	\$3,500
12-Inch Magnetic Flow Meter	1	EA	\$14,000	\$14,000
6-Inch Well Pressure Relief Valve	1	EA	\$8,500	\$8,500
3-Inch Well Anti-Surge Air Relief/Vacuum Assembly	1	EA	\$5,000	\$5,000

## Attachment 4 Budget

2-Inch Well Air Relief/Vacuum Assembly	1	EA	\$1,800	\$1,800
Bladder Type Surge Tank Assembly (Assumed 500 Gal)	1	EA	\$60,000	\$60,000
Miscellaneous Couplings, Taps etc	1	LS	\$15,000	\$15,000
<b><u>Electrical</u></b>				<b><u>\$417,900</u></b>
Electric Utility Connection fee	1	LS	3,000.00	\$3,000
MCC w/ 30 kVA TX, panel board, and Manual transfer switch	1	EA	65,000.00	\$65,000
250HP 18-pulse VFD w/ Multilin 369 relay	1	EA	70,000.00	\$70,000
480V Metered Switchboard, 600 Ampere	1	EA	35,000.00	\$35,000
Concrete pad (for Utility transformer)	1	EA	7,000.00	\$7,000
Conduit and Wire	1	LS	90,000.00	\$90,000
Lighting	1	LS	12,000.00	\$12,000
Ground Rod System	1	EA	900.00	\$900
Receptacles, switches, junction boxes, etc.	1	LS	5,000.00	\$5,000
Instrumentation	1	LS	10,000.00	\$10,000
Control Panel, including PLC, UPS, etc.	1	EA	90,000.00	\$90,000
PLC Programming	1	LS	30,000.00	\$30,000
<b>Subtotal Well 22 - Wellhead Equipping</b>				<b>\$1,142,800</b>
<b>TOTAL Wellhead</b>				<b>\$2,770,000</b>
<b>Untreated Groundwater Conveyance Piping</b>				
<b><u>General</u><sup>2,3</sup></b>				<b><u>\$127,500</u></b>
Mobilization/Demobilization	1	LS	\$102,000	\$102,000
Bonding and Insurance	1	LS	\$25,500	\$25,500
<b><u>Pipeline Construction</u><sup>5,6</sup></b>				<b><u>\$2,174,000</u></b>
16-Inch C200 Untreated Water Transmission Line from Well 22 to Well 21	700	LF	\$160	\$112,000
Demolition of Francis Mutual Pipeline from Well 22 to Well 21	700	LF	\$40	\$28,000
24-Inch C200 Untreated Water Transmission Line from Well 21 to Newport Ave/Mitchell Ave Intersection	1,300	LF	\$240	\$312,000
24-Inch C200 Untreated Water Transmission Line from Newport Ave/Mitchell Ave to Sycamore Ave	2,650	LF	\$240	\$636,000
24-Inch C200 Untreated Water Transmission Line from Newport Ave/Sycamore Ave. to School Lane	1,350	LF	\$240	\$324,000
24-Inch C200 Untreated Water Transmission Line from School Lane/Sycamore Ave to TUSD Bus Depot	1,150	LF	\$240	\$276,000
24-Inch Stl Carrier w/42-Inch Casing Pipe for Jack and Bore Crossing of RR/Flood Channel at Edinger Ave	300	LF	\$1,500	\$450,000
24-Inch Untreated Water Transmission Line from Jack and Bore to Treatment Plant Site	150	LF	\$240	\$36,000

<b><u>Pipeline Appurtenances</u></b>				<b><u>\$249,600</u></b>
16-Inch Isolation Valves	2	EA	\$10,000	\$20,000
24-Inch Isolation Valves	5	EA	\$22,000	\$110,000
Blow Off Assembly	4	EA	\$8,500	\$34,000
Air/Vac Assembly	4	EA	\$10,000	\$40,000
Fiber Optic Cable from Wells to Treatment Plant	7600	LF	\$6.00	\$45,600
<b>TOTAL - UNTREATED GROUNDWATER CONVEYANCE PIPING</b>				<b>\$2,550,000</b>
<b>Water Treatment Plant</b>				
<b><u>Design/Build Water Treatment Plant</u></b>				<b><u>\$14,300,000</u></b>
Engineering Design	1	LS	\$1,400,000	\$1,400,000
Construction	1	LS	\$12,900,000	\$12,900,000
<b>ITEM NO 3 TOTAL - WATER TREATMENT PLANT</b>				<b>\$14,300,000</b>
<b>Product Water Pipeline</b>				
<b><u>General<sup>2,3</sup></u></b>				<b><u>\$160,000</u></b>
Mobilization/Demobilization	1	LS	\$130,000	\$130,000
Bonding and Insurance	1	LS	\$30,000	\$30,000
<b><u>Pipeline Construction<sup>5,6</sup></u></b>				<b><u>\$2,961,000</u></b>
24-Inch Product Water Transmission Line from Treatment Plant to Edinger Bridge	11,000	LF	\$220	\$2,420,000
20-Inch Edinger Bridge Crossing	300	LF	\$850	\$255,000
24-Inch Product Water Transmission Line from Edinger Bridge to Harvard Ave Connection	1,300	LF	\$220	\$286,000
<b><u>Pipeline Appurtenances</u></b>				<b><u>\$191,750</u></b>
24-Inch Isolation Valves	6	EA	\$20,000	\$120,000
Air/Vac Assembly	3	EA	\$10,000	\$30,000
Blow Off Assembly	3	EA	\$8,500	\$25,500
Cathodic Protection Testing Stations	25	EA	\$650	\$16,250
<b>TOTAL - PRODUCT WATER PIPELINE</b>				<b>\$3,310,000</b>
<b>Brine Disposal Pipeline<sup>6</sup></b>				
<b><u>General<sup>2,3</sup></u></b>				<b><u>\$38,000</u></b>
Mobilization/Demobilization	1	LS	\$30,500	\$30,500
Bonding and Insurance	1	LS	\$7,500	\$7,500
<b><u>Construction of New Brine Disposal Facilities</u></b>				<b><u>\$440,000</u></b>
10-Inch Brine Disposal Force Main From Treatment Site to Red Hill Ave/Edinger Ave Intersection	2,000	LF	\$200	\$400,000
10-Inch Brine Disposal Connection Manhole	1	LS	\$40,000	\$40,000

Total project Construction

**\$23,408,000**

**Project Construction Notes:**

- 1 Capital cost are Class 4 estimates as defined by AACEI with estimated -15% to +30 range of accuracy
- 2 Includes Mobilization and Demobilization estimated at approximately 4% of total construction costs
- 3 Includes Bonding and insurance assumed at approximately 1% of total construction costs
- 4 Mechanical equipment based on preliminary design
- 5 Pipeline construction includes traffic control and pavement replacement, where applicable
- 6 Assumes Sewer Trench section per IRWD standard drawing and specifications

**E. Row (e) Environmental Compliance / Mitigation/ Enhancement**

Not applicable

**F. Row (f) Construction Administration**

	\$/hr	Quantity	Total
Construction manager	\$ 65	1600	\$ 104,000.00
Construction Manager II	\$ 65	1500	\$ 97,500.00
Office Engineer	\$ 60	550	\$ 33,000.00
Office Engineer II	\$ 55	550	\$ 30,250.00
Construction Inspector	\$ 35	1000	\$ 35,000.00
Construction Inspector II	\$ 35	550	\$ 19,250.00
Construction Inspector III	\$ 35	350	\$ 12,250.00
Materials Testing	\$ 35	650	\$ 22,750.00
Survey	\$ 35	650	\$ 22,750.00
Project Manager	\$ 65	250	\$ 16,250.00
Project Engineer	\$ 60	100	\$ 6,000.00
Design Engineer	\$ 45	250	\$ 11,250.00
CADD Drafter	\$ 40	250	\$ 10,000.00
CADD Drafter II	\$ 40	150	\$ 6,000.00
Legal Advisor	\$ 250	150	\$ 37,500.00
Project Engineer II	\$ 45	550	\$ 24,750.00
			<hr/>
			\$ 488,500.00
Fringe Benefits 125%			<hr/>
			\$ 610,625.00
Total			<hr/>
			\$1,100,000

**G. Row (g) Other Costs**

Not applicable.

**H. Row (h) Construction/Implementation Contingency**

Construction Contingency 20% of construction costs \$4,681,000

**I. Row (i) Grand Total (Sum rows (a) through (h) for each column)**

**Budget Summary: Santa Ana One Water One Watershed IRWM Prop 84,  
Round 1 Implementation Proposal**

Table 8 - Summary Budget						
Proposal Title: <b>Santa Ana One Water One Watershed IRWM Prop 84, Round 1 Implementation Proposal</b>						
Individual Project Title		Non-State Share (Funding Match)	Requested Grant Funding (DWR Grant Amount)	Other State Funds Being Used	Total	% Funding Match
<b>(a)</b>	Groundwater Replenishment System - Flow Equalization	\$27,947,964	\$1,055,556	\$0	\$29,003,520	<b>96%</b>
<b>(b)</b>	Sludge Dewatering, Odor Control, and Primary Sludge Thickening	\$138,115,600	\$1,055,556	\$0	\$139,171,156	<b>99%</b>
<b>(c)</b>	East Garden Grove Wintersburg Channel Urban Runoff Diversion	\$1,758,795	\$1,055,556	\$0	\$2,814,351	<b>62%</b>
<b>(d)</b>	Romoland Line A Flood System	\$7,400,410	\$1,055,556	\$0	\$8,455,966	<b>88%</b>
<b>(e)</b>	Santa Ana Watershed Vireo Monitoring	\$268,413	\$633,333	\$0	\$901,746	<b>30%</b>
<b>(f)</b>	Mill Creek Wetlands	\$14,355,000	\$1,055,556	\$5,000,000	\$20,410,556	<b>70%</b>
<b>(g)</b>	Cactus Basins	\$8,197,202	\$1,055,556	\$0	\$9,252,758	<b>89%</b>
<b>(h)</b>	Inland Empire Brine Line Rehabilitation and Enhancement	\$4,216,831	\$1,055,556	\$6,000,000	\$11,272,387	<b>37%</b>
<b>(i)</b>	Arlington Desalter Interconnection Project	\$501,908	\$422,222	\$0	\$924,130	<b>54%</b>
<b>(j)</b>	Perris II Desalination Facility	\$1,212,442	\$1,055,556	\$0	\$2,267,997	<b>53%</b>
<b>(k)</b>	Perchlorate Wellhead Treatment System Pipelines	\$541,000	\$1,055,556	\$0	\$1,596,556	<b>34%</b>
<b>(l)</b>	Chino Creek Wellfield Development	\$5,275,562	\$1,055,556	\$0	\$6,331,118	<b>83%</b>
<b>(m)</b>	Impaired Groundwater Recovery	\$35,370,000	\$1,055,556	\$0	\$36,425,556	<b>97%</b>
<b>(n)</b>	<b>Grand Total (Sum rows (a) through (h) for each column)</b>	<b>\$245,161,126</b>	<b>\$12,666,666</b>	<b>\$11,000,000</b>	<b>\$268,827,792</b>	<b>91%</b>